

DR. BARRETT'S
PARLOR GYMNASIUM

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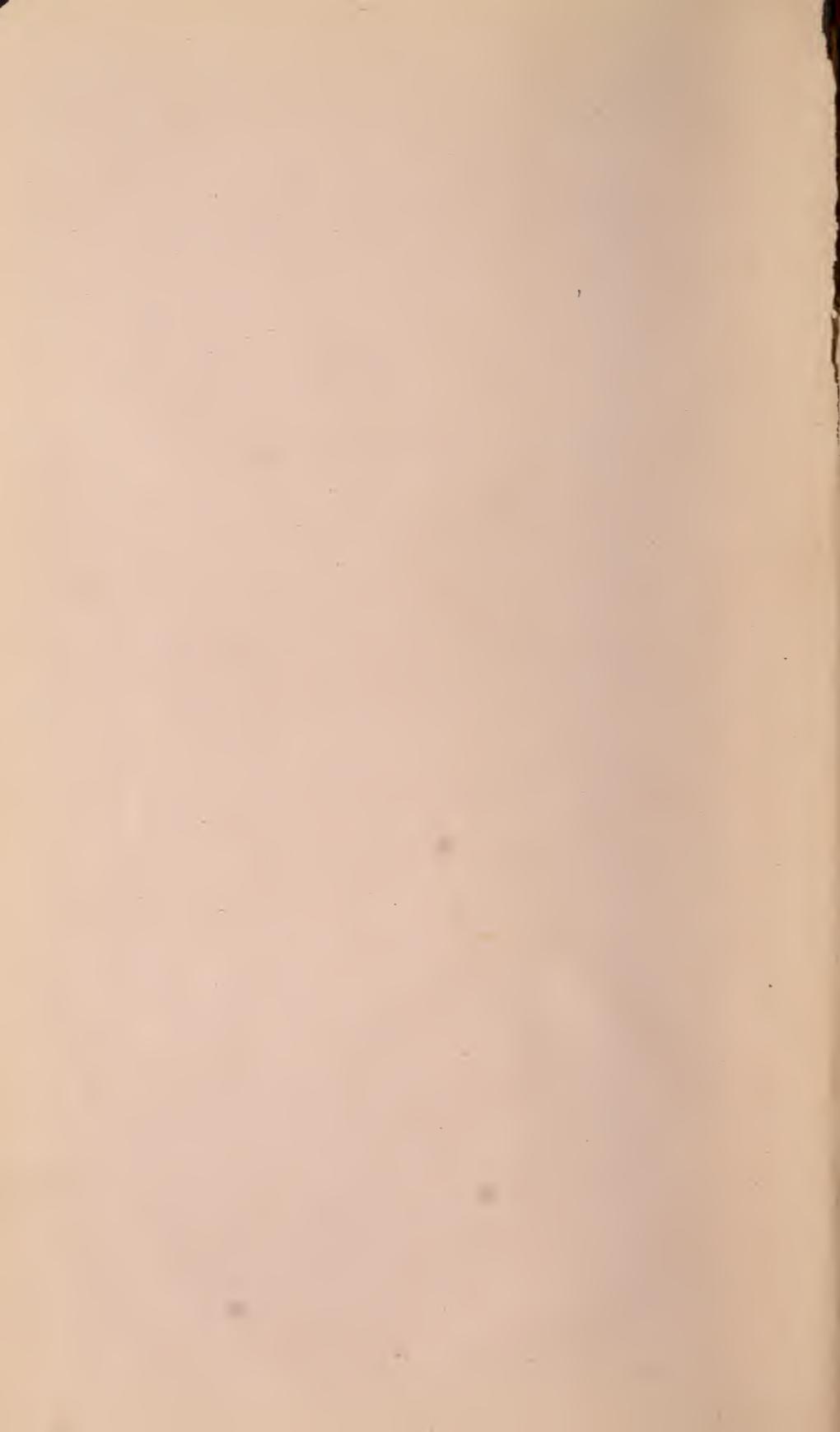
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Manual of Instruction.

[1st Frontispiece.]



FORMING THE BOWER.

See pages 103 & 114.

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[Adopted by the Board of Education of the City of New York.]

THE GYMNASIUM AT HOME.

Utility and Amusement Combined.

BARNETT'S PATENT

PARLOR GYMNASIUM

AND

Chest Expander,

FOR SCHOOLS AND FAMILIES.

FOR THE YOUNG, OLD AND MIDDLE-AGED; FOR THE NARROW-CHESTED; FOR THE ROUND-SHOULDERED; FOR PERSONS AFFLICTED WITH SPINAL DISTORTIONS; FOR DYSPEPTICS; FOR LADIES SITTING AT THE SEWING MACHINE, AND ALL PERSONS ENGAGED IN SEDENTARY EMPLOYMENT.

With Illustrations from Life.

1871

BY

S. M. BARNETT, M. D.

New York 1140 BROADWAY.

J. BECKER & CO.,

SOLE AGENTS.

GV481
ED 287

[Entered according to Act of Congress, by S. M. Barnett, in the
office of the Librarian of Congress, at Washington,
in the Year A.D. 1871.]

TO THOSE

WHO BELIEVE WITH ME

THAT

NOT ONLY SHOULD THE HOUSE BE WELL STORED.

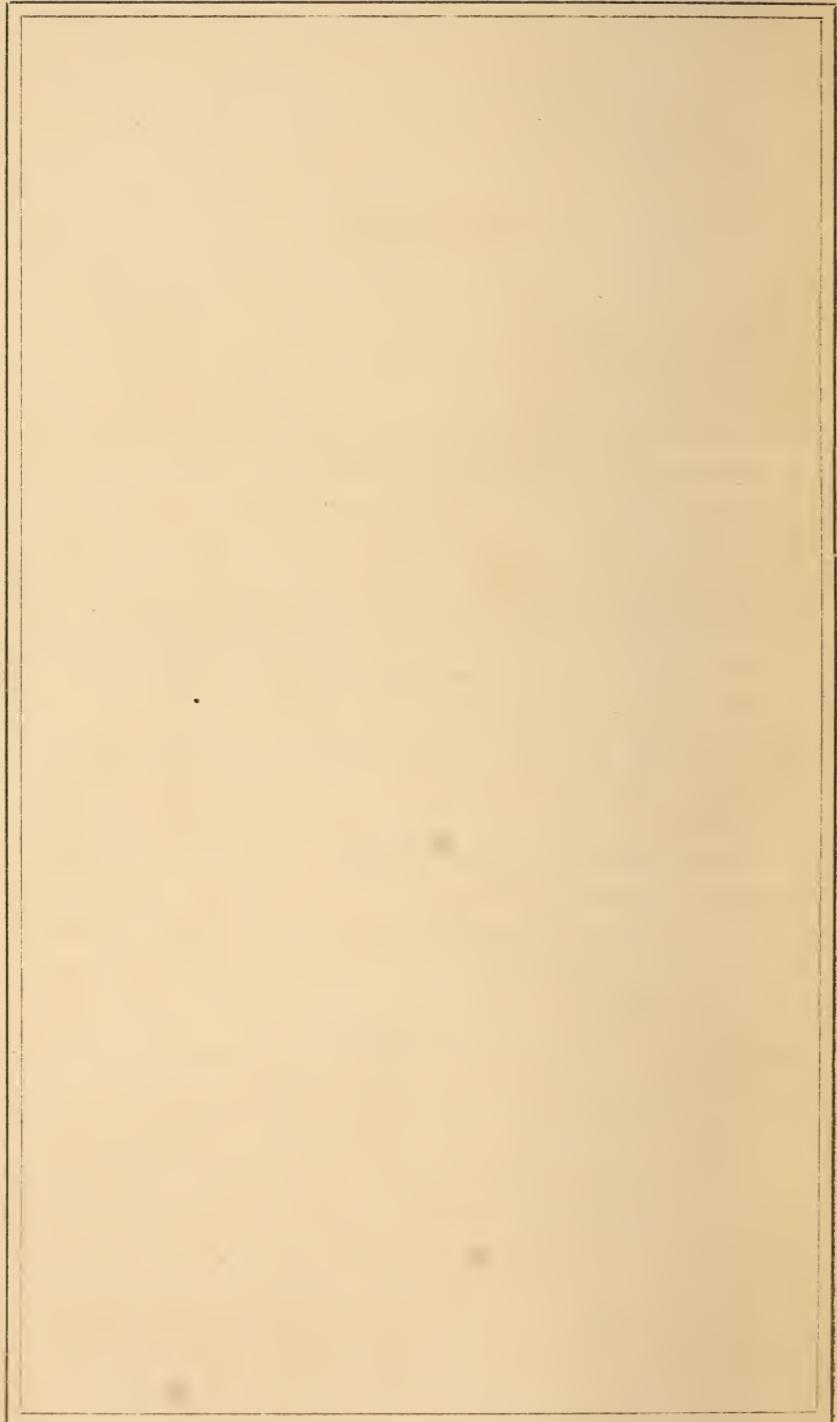
BUT THAT

THE STRUCTURE SHOULD BE SOLID AND ENDURING.

This Work

IS RESPECTFULLY

INSCRIBED.



PREFACE.

It is not purposed to elaborate an essay on the subject of physical training in a work of this kind, but a few remarks thereon may be deemed appropriate. The importance and *necessity* of a certain amount of physical culture should be patent to all. It is not necessary for every one to become a prize fighter or a Hercules, nor has nature endowed *all* with an equal amount of strength, but a judicious system of training will foster and develop that which has been allotted.

Many suppose jumping, ball playing, sawing wood, boating, and such like exercises, to be all that are necessary. This is a great error. Very violent exercise and hard work consume the vital forces, but do not cultivate them, for the physical, like the intellectual, requires *systematic* culture. Compare the action of study, and we shall be convinced that it is a mental calisthenic developing by exercise the faculties and forces of the brain. POWER IS SUBSERVIENT TO SYSTEM, and, utilized by it alone, a disciplined body of troops is capable of effecting more than an unsystematized rabble. The same rule will apply to the physical forces, the muscles being, as it were, disciplined soldiers, ready at the will of their officer, the brain, to perform the evolution with precision and an *appropriate* distribution of force.

"It is better to seek to develop the entire nature, intellectual, moral and physical, than to force one part

of it into a prominence that stunts and kills the rest.”
—*The Country Parson.*

It would be well if the suggestion contained in the above lines were more frequently acted on. In thousands of instances, either through ignorance of natural laws or the false pride of parent or tutor, the mental stomach, so to speak, is surfeited with food which a weak and uncultured physical organization is forced to aid in digesting, giving to only one part the portion which is the natural heritage of all. So prominent has this fact become, that public functionaries have called special attention to it. A correspondent of the *N. Y. World*, under date of April 22, prefaces the report of the State Board of Education of Massachusetts upon this subject with the following remarks :

“There is a want of proper equilibrium between the mind and the body, and a proper effort to cultivate physical health and development. One set of School Committeemen furnishes this picture. Go into one of our schoolrooms, and the number of *pale faces, of narrow chests and round shoulders* that you see, tell of over application and of the sowing of the seeds of a multitude of diseases which the after life must ripen. The thin, weak voices which you hear at recitation tell of a lack of physical vigor, from which you can anticipate sad results.” Not only in Massachusetts, but in every other State, does this evil exist to a greater or lesser extent.

If we make a comparison, we shall find that the chest is to the human body what the boiler is to the steam engine—it makes the motive power, the stomach being, so to speak, the furnace, receiving the fuel in the shape of food ; the steam (vitality) is gen-

erated by the combined action of the lungs, heart and minor thoracic organs ; hence the importance of a healthy chest development. Dr. Dio Lewis, in "The New Gymnastics," says : "Since we have, unhappily, become a military people, the soldier's special training has been much considered as a means of general physical culture. Numberless schools, public and private, have already introduced the drill, and make it a part of each day's exercises. But this mode of exercise can never furnish the muscle culture which we Americans so much need. Nearly all our exercise is of the lower half of the body ; we walk, we run up and down stairs, and thus cultivate hips and legs, which, as compared with the upper half of the body, are muscular, but our arms, shoulders and chest are ill-formed and weak. Whatever artificial muscular training is employed should be directed toward the upper half of the body. Need I say that the military drill fails to bring into varied and vigorous play the chest and shoulders ? INDEED, IN ALMOST THE ENTIRE DRILL ARE NOT THESE PARTS HELD IMMOVABLY IN ONE CONSTRAINED POSITION ? In all but the cultivation of uprightness, the military drill is singularly deficient in the requisites of a system of muscle training adapted to a WEAK CHESTED PEOPLE." How many parents, and even educators, condescend to give a serious thought to the *proper* physical education of those committed to their charge. They seem to forget that the *use of the body is to feed and sustain the mind.* While they glow with pride at the evidences of a thorough mental training displayed by their young, they would, doubtless, treat with derision or contempt the suggestion of *systematic physical culture.* Look at the

poor clerk, seamstress, or any of those unfortunates whose occupations are sedentary, and whose means permit but a brief relaxation or change of air, if any at all. In vain do they have recourse to medicines—the narrow chest, the blanched and hollow cheek and bloodless lips are there. Tell them that the chest needs expansion and the lungs inflation, by a system of mild or light gymnastic exercise, some will smile incredulously, having all their faith invested in drugs, and consequently none to spare for the consideration of natural facts. Others will urge that a suitable place, and too great an amount of time and preparation, which they cannot spare from their business avocations, would be necessary for the Gymnasium, besides the fatigue and expense attendant. As this apparatus can be adapted to very nearly, if not all, of the exercises performed with dumb bells, Indian clubs, wands, rings, &c., combined, it is designed to obviate these difficulties, the book serving as instructor, and the apparatus as a convenient *Gymnasium*, ever at hand, and both at such a comparatively trifling cost that there is no reason why any one should be PUNY, ROUND-SHOULDERED OR AWKWARD IN THEIR MOVEMENTS.

Introductory.

“MENS SANA IN CORPORE SANO.”

In the various efforts put forth by the instructors and advocates of physical culture to benefit mankind, there has hitherto been many disadvantages to contend against. With some it has been in the necessity for a low-priced apparatus, combined with effectiveness, so as to be within the means of rich and poor; with others it has been convenience and simplicity of construction. There is the Gymnasium, with its multiplicity of appliances and requisites of special costume and location; there is the dumb-bell, *dumb* in its *dead* weight, but loud enough in its *heavy strain*; there is the Indian club, aboriginal in name, and perhaps as primitive in origin, both lacking in important essentials, and either of which, if not very heavy, are used in “merely dashing and fisting the air, with nothing to stay the arms in their movement,” as Prof. Clark says; there is the “Health-lift,” an apparatus costing from \$100 to \$300; besides many other single or combined apparatuses, which are found to be either too ineffective, cumbersome or expensive.

Barnett’s Parlor Gymnasium and Chest-Expander is designed for graceful, easy and effective exercise. IT DOES NOT NECESSITATE SPECIAL DRESS, LOCALITY OR PREPARATION, but is a light portable apparatus, possessing a remarkable advantage over dumb-bells, Indian clubs, &c., in its PERFECT ADAPTABILITY TO THE

USE OF ALL PERSONS, OF BOTH SEXES, AND, FROM ITS ELASTICITY, PRESENTING A SERIES AND VARIETY OF EXERCISES UNATTAINABLE BY ANY OTHER APPARATUS.

Calling into play a sufficiency of muscular action, without being ponderous, its peculiarity is to impart the “poetry of motion” to every movement; and in this respect the Greek word “Calisthenics,” signifying “beautiful and strength,” is applicable to it.

Nothing can present a nearer resemblance to or harmonize more closely with the action of the muscles themselves than this apparatus. It will be seen that every movement carries with it *a reflex action*; thus, if you move the arm, the elasticity of the band exerts a force to bring it back again, or resists the same movement, creating, if desired, a double action to every exercise.

It will fit you for the elegancies of the ball-room or parlor, impart a free elasticity to every movement, change your awkward, shuffling gait to erect and graceful carriage; teach precision and accuracy to the *military man*; by its use *the dancer, the orator, the actor* may acquire an ease and grace which few other exercises can impart.

For ladies it is a light and pleasant parlor exercise, and counteracts the effects of bending over a book or sewing. CLERKS, LAWYERS, STUDENTS AND MINISTERS recognize its usefulness and convenience, as it can be CARRIED IN THE POCKET, READY FOR USE at any moment during study, many exercises being performed without the necessity of rising from the seat.

IT WILL STRENGTHEN WEAK LUNGS.

FOR NEURALGIA, HEADACHE, SLEEPLESSNESS, AND OTHER NERVOUS COMPLAINTS—

Employ almost any of the 2d series of these exercises, *keeping tight grasp of both handles*, and repeating the exercises at intervals. The course of its action being through the spinal column to the nervous plexuses and base of the brain, its influence brings every nerve fibre into play, ACTING ALMOST LIKE AN ELECTRIC BATTERY, AND INDUCING AN EQUALIZATION OF THE CIRCULATION OF THE BLOOD.

Persons of weak constitutions or in delicate health will find, by the STEADY USE of this apparatus, a visible increase of strength, by commencing with the No. 1, and continuing with this number until capable of using a No. 3, and so on to the other sizes.

In another part of this book are given some examples of postures, combined exercises, tableaux, quadrilles, waltzes, &c., &c., showing the versatility of exercise possible with this apparatus. In some instances it has been substituted for croquet as an out-door and parlor entertainment. The various figures, tableaux, &c., present quite a beautiful effect, and, by the exercise of a little judgment, an almost endless variety can be invented.

According to the manner of using this apparatus, the amount of force and weight employed can be graduated at will; thus, in the "Pulleys," the "Health-lift," and several other exercises, the effect can be made just the same as that caused by the lifting of heavy weights, *without the strain* usually consequent upon such exertion; while in many ways it can be made to act directly upon the nervous system. Those who use this apparatus pronounce it the "summum bonum" of all modes hitherto invented for physical culture.

TESTIMONIALS.

A few of numerous testimonials are here submitted:

From the Hon. Henry Kiddle, A. M.

DEPARTMENT OF PUBLIC INSTRUCTION,
Superintendent's Office,
146 Grand St., New York, June 19, 1871. }

The "Parlor Gymnasium and Chest-Expander" of Dr. Barnett has been used in very many of the public schools of this city, and has been found a very valuable aid in conducting exercises for physical culture. No apparatus that I have seen seems to be so well calculated to promote the object designed, while the exercises with it are agreeable, graceful, and appropriate for schools.

HENRY KIDDLE,
City Superintendent.

From the N. Y. Sun, April 22.

The male department of Grammar School No. 26, in West Thirtieth street, exhibited its proficiency yesterday.

The "Gymnastic Exercises, by a class of sixty, with Barnett's Parlor Apparatus," was the most attractive feature in the exhibition.

* * * * *

From the New York Ev'g Mail, April 28.

At the invitation of the Principal of Grammar School No. 26, a large number of Principals and teachers assembled this morning in the chapel of the school in West Thirtieth street, to witness an exhibition by the scholars of calisthenic exercises with an apparatus known as "Barnett's Parlor Gymnasium and Chest Expander." Previous to the exercises in calisthenics the scholars repeated the exercises

which were performed at their reception a few days since. The apparatus is very simple, consisting of only a band of rubber about two feet long, with a piece of wood at each end for a handle. The exercises were performed in concert by a class of about fifty boys, and consisted of placing the band in various positions and stretching it in time with music. In this manner the muscles of the whole upper portion of the body are brought into play and naturally developed. The system has been introduced into several of the public schools, and a large number of private schools are also using it.

From the New York Herald of April 29, 1871.

Owing to the crowded condition of the halls of the new, spacious and elegant building near Broadway, in West Thirtieth street, at the late "reception" by the pupils of Grammar School No. 26, the programme, by general request, was yesterday repeated to a large audience. Evergreens and flowers, busts and statuettes added the charms to the bouquet of 600 youths that filled the chapel at ten A. M.

* * * * *

But the exhibition in "gymnastics" by a class of sixty, with Dr. Barnett's Parlor Apparatus, was, perhaps, the most interesting feature of the day. Such perfection of drill as was exhibited is seldom seen in a public school, and it is pleasing to learn that physical culture is a portion of the course of training in this department.

From the Globe, April 29.

PUBLIC SCHOOL RECEPTION.—Public school receptions are becoming prominent features in our educational system, and we like the idea as tending to greatly improve the spirit of the scholars. We were present at one of these reunions, given by the pupils of the Grammar School in Thirtieth street, near Sixth avenue, yesterday. The room was tastefully arranged, and the majority of the audience were teachers, who assembled especially to witness a series of gymnastic exercises with an apparatus of very simple construction. We were highly pleased with the novelty as well as efficiency of the apparatus, and the precision of the boys in their various evolutions. Some fine singing and recitations closed the exercises.

From the Evening Post, April 29.

The question of physical culture in our schools drew together, yesterday, at Grammar School No. 26, a large number of teachers and others to witness calisthenic exercises with a new apparatus. The evolutions were performed by about eighty boys, and were very interesting, eliciting the approval of the spectators.

From the N. Y. Herald, June 22.

SEMI-ANNUAL DISPLAY BY THE FEMALE DEPARTMENT OF GRAMMAR SCHOOL No. 29.—Among the many exhibitions which take place in this city, illustrating progress in various departments of knowledge, there is not one that appeals so forcibly for the interest and regard of the public as does the semi-annual display in a public school. Yesterday afternoon one of these interesting gatherings occurred in the Female Department of the First ward Grammar School, when the semi-annual distribution of certificates and prizes took place before a large number of friends of the pupils.

* * * * *

An interesting feature of the display was the exercise in calisthenics, with Barnett's Parlor Apparatus, in which the children, in sections, went through the various parts in response to orders given on the piano.

* * * * *

From the New York School Journal of June 24.

* * * * *

The calisthenic exercises with Barnett's Parlor Apparatus, lately introduced into the schools, cannot be too highly praised, inasmuch as they help to remove, in a measure at least, the injuries incurred by the close application of the school-room. As shown at No. 29, on Wednesday, it is evident that it can be made a very showy affair for reception and fete days.

From the N.Y. School Journal of July 1.

THE RECEPTION OF GRAMMAR SCHOOL No. 41, Senior Department, took place on Wednesday afternoon, with the following programme :

* * * * *

A class of one hundred girls gave a very entertaining performance with Dr. Barnett's chest expanders. The handles of

the expanders were ornamented with ribbons of various colors which blended in the calisthenic movements, and presented at times the semblance of a moving flower garden. The girls performed a series of waltzes and quadrilles illustrating the versatility of exercise of which the apparatus is capable. The rubber bands, when crossed, formed a bower, under which each girl turned in waltz movement, presenting an endless variety of attractive and graceful positions.

From the N. Y. Herald, July 4.

EXERCISES IN GRAMMAR SCHOOL No. 12.—The distribution of semi-annual certificates and presentation of gold medals took place in the Primary Department of this school, in Madison street, on Friday afternoon. The exercises consisted of songs, recitations, calisthenics, &c. The calisthenic exercises, with Dr. Barnett's Parlor Apparatus, were particularly fine, and afforded additional evidence of the healthful advantages to be derived from a proper use of this simple apparatus.

* * * * *

From the New York School Journal, July 22.

GRAMMAR SCHOOL No. 4.—Last Wednesday morning Grammar School No. 4, in Rivington street, near Ridge, was thronged with ladies and gentlemen, who were present to enjoy the closing exercises of the Female and Primary Departments, on the occasion of the distribution of semi-annual certificates.

* * * * *

The advantages resulting from calisthenics were clearly shown by a select class, which gave an exhibition of gymnastic exercises with Dr. Barnett's chest expanders.

* * * * *

GRAMMAR SCHOOL No. 24, FEMALE DEPARTMENT,)
NEW YORK CITY, 1868. }

Dear Sir : Your "Chest Expander" has been in use in this school, and I have found that it serves every purpose for which it was intended. I am highly pleased with it, and think it a desirable article for every school and family.

Yours, &c.,

MARGARET A. MCCOSKER,
Principal.

From DR. DIO LEWIS, author of various Works on Physical Culture.

17 BEACON STREET, BOSTON, June 17, 1868.

My Dear Sir: Your new device for exercising the muscles of the upper half of the body is an admirable one. The great deficiency in the artificial means of exercise thus far introduced, is a lack of adequate training for the extensor muscles. Our gymnastic training falls upon the flexors, which, as in the ordinary avocations of life, receive nineteen-twentieths of the work, scarcely need providing for in systems of artificial training. This contrivance of yours falls almost exclusively upon the extensor muscles. In this view it fills an important niche, and is really deserving of popular patronage.

I should be very glad to see your invention introduced into our public and private schools. Its perfect adaptation to home exercise, for persons of both sexes and of all degrees of strength, cannot fail to impress favorably every thoughtful person who may examine it. I shall be happy to assist you in any and every way in my power to introduce your Chest Expander.

I am, very truly, yours,

DIO LEWIS.

115 WEST 46TH STREET, NEW YORK, }
November 18, 1869. }

Dear Sir: I have had your "Patent Parlor Gymnasium" in use by the scholars of my Institute for over eight months, and am pleased to say they have given every satisfaction. Two of my children, a boy and a girl, who were inclined to grow up round-shouldered have, by the use of them, become straight, and the chest shows a healthy development.

Very truly, yours S. E. HART,
Late Sup't Jewish Orphan Asylum, New York City.

REV. C. W. SCOTT, in a letter, dated Feb. 26, 1868, having seen them used by his friends, and personally tested them, says: "I am fully convinced of their efficiency to effect a perfect development of the body."

From Prof. R. B. Clarke.

FITCHBURG, Mass., Aug. 30, 1869.

DEAR SIR: I have to-day received your box containing four

doz. "Expanders," two doz. of which are No. 2, and two doz. No. 3. I find that the No. 3, especially, are better adapted to the strength of pupils of sixteen or seventeen, and will try the muscle of a pretty good arm. I am well aware that much depends upon the teacher for the success of calisthenic exercises, as for the other exercises of the school room. I know, in fact, that many who succeed well in other respects fail here. But I also know that, with *something to stay the arms in their movement, the scholar may seem to be exercising for an object, and not merely dashing and fisting the air, there will be a greater interest manifested in the practice.* Exercise for the chest and upper extremities is by far the most successful of any for our scholars, a large proportion of whom are growing up with round shoulders and feeble forms. Your "Expanders" meet this want of our pupils better than anything heretofore presented to the public. They can be used quite conveniently in the school room or elsewhere, while the grace of movement, with an eye to which they seem to have been designed, must always make them a favorite.

Yours very truly, R. B. CLARKE,
Principal of High School.

NEW YORK, May, 1871.

DR. BARNETT—

Your Parlor Gymnasium and Chest Expander is in use in our several departments. We esteem it as the most simple and comprehensive article of the kind ever invented, combining a variety of exercises. We consider it a valuable aid in physical culture, and believe its merits will be fully appreciated wherever used :

ELIZABETH T. VANCE, Principal of Primary Department Grammar School No. 57.

J. S. WARNER, Principal Male Department Grammar School No. 57.

MARY A. FREEMAN, Principal Primary Department Grammar School No. 39.

M. A. WASHBURNE, Principal Female Department Grammar School No. 39.

FRANCES E. A. GUTCH, Principal Female Department Grammar School No. 49.

SARAH J. J. McCAFFERY, Principal Primary School No. 16.

CAROLINE F. WHITING, Principal Female Department Grammar School No. 14.

SARAH F. BUCKALEW, Principal Primary Department No. 49.

CATHARINE A. THOMPSON, Principal Primary Department No. 3.

T. DWIGHT MARTIN, Principal Male Department Grammar School No. 32.

M. LOUISE CLAWSON, Principal Female Department Grammar School No. 48.

H. WILLIAMSON, Principal Male Department Grammar School No. 53.

LAFAYETTE OLNEY, Principal Male Department Grammar School No. 14.

J. T. BOYLE, Principal Male Department Grammar School No. 42.

P. L. LOSS, Principal Primary Department Grammar School No. 42.

CHAS. L. REASON, Principal Grammar Department Colored School No. 3.

ALONZO HOPPER, Principal Male Department Grammar School No. 11.

LUCRETIA E. MAGUIRE, Principal Primary Department Grammar School No. 56.

AMANDA M. HOUSE, Principal Primary School No. 27.

W.M. BAKER, Principal Male Department Grammar School No. 55.

ABBY N. BEALE, Principal Primary Department Grammar School No. 11.

S. D. ALLISON, Principal Male Department Grammar School No. 7.

HANNAH M. GEDNEY, Principal Primary Department Grammar School No. 34.

KATHERINE W. WHITE, Principal Female Department Grammar School No. 29.

CARRIE V. FRANKLIN, Principal Primary Department Grammar School No. 12.

MARY J. O'LEARY, Principal Female Department Grammar School No. 1.

MARY J. GALLAGHER, Principal Female Department Grammar School No. 23.

M. LOUISA SCOTT, Principal Senior Department Grammar School No. 41.

SARAH E. BUCKBEE, Principal Primary Department Grammar School No. 19.

H. LOUISE CLARK, Principal Primary School No. 26.

JOHN J. DELANEY, Principal Male Department Grammar School No. 12.

MELINDA N. CLARK, Principal Female Department Grammar School No. 36.

HENRIETTA FISK, Principal Primary School No. 39.

SARAH A. JARVIS, Principal Primary Department Grammar School No. 15.

MARIA JASPER, Principal Primary Department Grammar School No. 58.

CARRIE E. CARL, Principal Primary School No. 1.

CLARA A. ROOT, Principal Primary Department Grammar School No. 7.

SARAH A. BUNKER, Principal Female Department Grammar School No. 7.

EMILY A. WHITE, Principal Primary Department Grammar School No. 4.

ANNIE McVEY, Principal Primary School No. 3.

ELLIE DENEHEY, Principal Primary Department Grammar School No. 31.

SARA E. RAYWOOD, Principal Primary School No. 36.

MATILDA MOSHER, Principal Female Department Grammar School No. 2.

FRANCIS Jos. HAGGERTY, Principal Male Department Grammar School No. 2.

S. E. WOODWARD, Principal Female Department Grammar School No. 47.

BENJ. D. L. SOUTHERLAND, Principal Male Department Grammar School No. 3.

MARGARET DONEGAN, Principal Primary School No. 14.

H. M. SANBORN, Principal Male Department Grammar School No. 10.

W. F. HUDSON, Principal Male Department Grammar School No. 18.

C. L. DUGAN, Principal Primary Department Grammar School No. 8.

CHAS. W. LORD, Principal Male Department Grammar School No. 8.

SARAH SMITH, Principal Primary School No. 6.

ALEX. MOREHOUSE, Principal Male Department Grammar School No. 20.

MARY McCLOSKEY, Principal Primary Department Grammar School No. 17.

ELIZABETH C. JONES, Principal Primary School No. 22.

CAROLINE HOPKINS, Principal Female Department Grammar School No. 42.

H. C. MARTIN, Principal Male Department Grammar School No. 34.

HARRIET N. GOLDEY, Principal Female Department Grammar School No. 34.

—And others.

Mr. HUGH CARLISLE, Principal of Grammer School No. 26, in a letter of introduction, dated May 8, 1871, recommending the article for use in schools, says:

“This is the apparatus in the use of which we exhibited a class at our recent Reception. It has lately been placed on the list of supplies for the schools of New York, and is already in use in a large number of them.

“The apparatus consists of a mere band of india rubber, fixed in a couple of handles, yet it admits of as great a variety of movements as a complete outfit of dumb bells, Indian clubs, rings and wands. I think this was shown by exercises performed with it in our school on the day of the Reception. Scholars have as much right to physical training at the public expense as they have to mental training, and if an apparatus is to be used, the versatility and inexpensiveness of this one, it seems to me, point it out as the most available.”

From PROF. STEELE, Ph. D., author of Fourteen Weeks' Natural Sciences, and President N. Y. State Teachers' Association.

LOCKPORT, July 28, 1871.

DR. BARNETT: I have witnessed with pleasure the exercises performed by a pupil of yours with the Par-

lor Gymnasium, on the occasion of the State Teachers' Convention at Lockport, and am favorably impressed to such an extent that I should like to see them in every school. It is an admirable contrivance, and seems to be eminently adapted to versatility and effectiveness of exercise.

J. DORMAN STEELE,
Elmira Free Academy.

From the Lockport Daily Journal, July 27, 1871.

THE STATE TEACHERS' ASSOCIATION. * * * * * * *
The President announced an exercise by Master Heinmuller, of New York, of Barnett's Parlor Gymnastic Chest Expander, which has recently been adopted by the Board of Education in the city of New York for the use of schools. The exercise was very fine, especially the posturing, and was received with evident satisfaction by the many teachers present.

From the Syracuse Daily Standard, August 2, 1871.

NEW YORK STATE TEACHERS' CONVENTION.— * * * * * The evening's exercises at the hall commenced with an exhibition by Master Heinmuller, a pupil of one of the public schools of New York, with a novel apparatus called Dr. Barnett's Chest Expander. The young lad went through the movements finely, and met with the plaudits of those present. * * * * *

SIZES.

To make the No. **1**, take off the top band of the No. **2**, by withdrawing the pins from both handles, one band only being retained in its place by replacing the pins. This size is for very small children or invalids.

No. **2** is for children of from 6 to 12 years of age, and is not very well adapted to adults.

No. **3** is for youths and ladies.

No. **4**, for adults of ordinary strength.

No. **5**, for persons of extra strength. Those desiring to prepare themselves for the heaviest class of gymnastics will find this size an effective assistant and try the strength of a muscular arm. Its action can be made to equal fifty pounds.

DIRECTIONS.

Keep the heels close together, the toes turned outward, the chest thrown forward, and the mouth slightly open, that the lungs may have full play. Keeping the heels together has reference to the 1st and 2nd series, in which the body is erect.

Always hold the handles perpendicularly, grasping them firmly below the band, and in the part curved for that purpose; the thumb should not be placed on or above the rubber band, but should bend to form the grasp, the end overlapping the second joint of the first finger, as shown by the lower hands of Fig. 1.

Always keep the band tightened so that its tension may be felt.

In no case is it necessary to stretch the band to its very utmost capacity, nor to let it relax entirely, or

with a sudden jerk. If more force is required shorten the band, as explained on page 69.

The number of times for repeating the movements in each exercise will be determined according to the disposition and strength of the person using the apparatus, but for several persons exercising as a class, it will, of course, be necessary to observe some uniformity of movement. [See Tableaux, page 73; to teachers, page 99; and class exercise, page 101.]

There is no special time for using the apparatus, except that soon after eating, no unusual exertion is beneficial.

There are a great many persons who, in their enthusiasm on commencing, imagine that they must employ the greatest amount of effort and rapidity in exercising, as though the most beneficial results would be in proportion to the amount of force employed. The effect of this error often produces a slight feeling of soreness, causing discouragement. This is frequently the case with persons of sedentary habit and unaccustomed to exertion differing from their usual avocations, and can almost always be avoided by beginning with moderation. To remove any such inconvenience, however, the use of cold water, either as an application or bath, and the continuance of the exercises more moderately, will have the desired effect, and *those who persevere in the use of this apparatus with ordinary judgment and common sense are assured that they will reap the benefits of their efforts in the attainment of the highest degree of health and strength possible to their constitution.*

Note.—The hand or arm designated as “at rest,” should not be moved until the change of movement is indicated in the instructions. The effectiveness of the exercises will be materially increased by keeping a FIRM GRASP OF THE HANDLES.

FIRST SERIES.

Any of these may also be used for class exercise.



Fig. 1.

1st EXERCISE.

SHOULDERS, ARMS AND CHEST.

Position as in Fig. 1, holding the band horizontally across the chest, the hands being level with the shoulders.

MOVEMENTS—*Both hands.*—1st, carry the band up to and over the head, as in Fig. 1, *dotted arms*; 2d, backward and down to the neck, as in Fig. 2, *dotted arms*; 3d, from the back of the neck down, as in Fig. 2; 4th, up to the back of the neck; 5th, over the head, as in Fig. 1, *dotted arms*; 6th, carry the band forward and down to position. Repeat.

2nd EXERCISE.

ARMS AND CHEST.

Position as in Fig. 2, holding the band behind, both arms extended downward.

MOVEMENTS—*Left hand at rest.*—1st, raise the right hand to the right shoulder, the band passing obliquely across the back, as in Fig. 3; 2d, straighten the right arm upwards, as in Fig. 4; 3rd, bring the right hand down again to the right shoulder, as in Fig. 3. Repeat. The reverse movements are made in the same manner, with the left hand up and the right hand at rest.

3rd EXERCISE.

ARMS AND SHOULDERS.

Position.—The right arm bent over the head, the left arm bent, its elbow level with the waist, as in Fig. 5, *dotted arm b*, the band being held obliquely at the left side.

MOVEMENTS—*Both hands.*—1st, carry the right hand to the back of the head; 2d, bring it up again over the head forward, down to and in front of the forehead; 3d, up again over the head, backward to the back of the head; 4th, up and over the head to position. The band in these movements will pass back and forth at the left side. The left hand will move very

slowly, while the right hand describes a semicircle from the forehead over to the back of the head, and *vice versa*. Repeat. The reverse movements are with the band at the right side, the left arm bent over the head, and the right arm bent, its elbow level with the waist.

4th EXERCISE.

ARMS, SPINE AND CHEST.

Position as in Fig. 6, both arms extended downward, the band held in front, and being horizontal.

MOVEMENTS—*Left hand at rest*.—1st, carry the right hand up to the forehead, as in Fig. 7; 2d, over the head backward, and down against the right shoulder blade, as in Fig. 3; 3d, down behind to the level of the left hand, as in Fig. 2; 4th, now raise the left hand up to the back of the head; 5th, carry it over the head forward, and down to the forehead, as in Fig. 7; and, 6th, down to position. Repeat. The reverse movements are made by commencing the exercise with the left hand.

5th EXERCISE.

ARMS, SHOULDERS, ELBOWS AND CHEST.

Position as in Fig. 2, *dotted arms*, both arms bent, the band being held at the back of the neck.

MOVEMENTS—*Left arm at rest*.—1st, straighten the right arm laterally on a line with its shoulder, as in Fig. 8; 2d, back again to position. Repeat. The reverse movements are right arm at rest, left arm moving.

6th EXERCISE.

CHEST AND ARMS.

Position as in Fig. 1, holding the band horizontally

across the chest, the hands being at the shoulders.

MOVEMENTS—*Both hands.*—1st, carry the band up over the head, as in Fig. 1, *dotted arms*; 2d, backward down to the back of the neck, as in Fig. 2, *dotted arms*; 3d, up again over the head, as in Fig. 1, *dotted arms*; 4th, down to position; 5th, straighten both arms out in front, as in Fig. 9; 6th, back to position; 7th, again carry the band up over the head; 8th, backward down to the back of the neck; 9th, up again over the head; 10th, down to position; 11th, extend the arms in front; 12th, bring the band back to position. Repeat.

7th EXERCISE.

SPINE, CHEST AND ARMS.

Position as in Fig. 2, *dotted arms*, both arms bent, the band held at the back of the neck.

MOVEMENTS—*Left arm at rest.*—1st, drop the right arm, as in Fig. 3; 2d, carry it up again to position. Repeat. Reverse with right arm at rest, left arm moving.

8th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 12, *dotted arms A*, both arms obliquely downward, the band being in front, and held horizontal.

MOVEMENTS—*Left hand at rest.*—1st, carry the right hand obliquely up and across the chest to the left shoulder, as shown by *dotted arm B*, Fig. 6; 2d, drop the right hand down to position; 3d, now raise the left hand up to and across the chest to the right shoulder, 4th, down again to position. Repeat, moving each hand alternately.

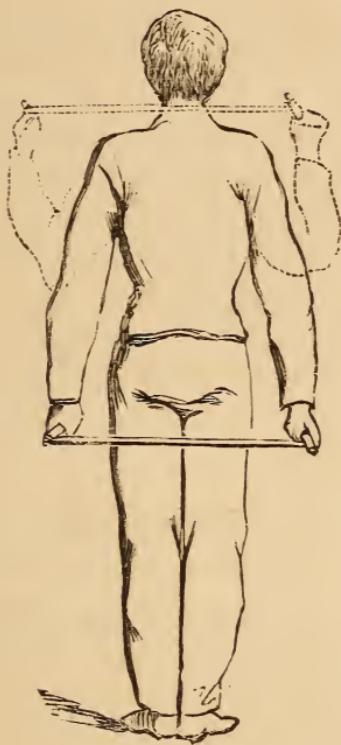


Fig. 2.

9th EXERCISE.

ARMS, WRISTS AND SHOULDERS.

Position as in Fig. 6, both arms extended downward, the band being in front, and held horizontal.

MOVEMENTS—*Left arm at rest*.—1st, carry the right hand obliquely up and across the chest to the left shoulder, as shown by Fig. 6, *dotted arm*; 2d, up to the forehead, as in Fig. 7; 3d, carry the right hand out in front from the forehead, extending the arm obliquely upward, as in Fig. 10, *dotted arm B*; 4th, bend the arm, carrying the right hand back to the forehead, as in Fig. 7; 5th, down to the shoulder, as in Fig. 6, *dotted arm B*; and, 6th, down to position. Repeat.

The reverse movements are with right hand at rest, left hand moving.

10th EXERCISE.

SHOULDERS AND ARMS.

Position as in Fig. 9, both arms being straight out in front.

MOVEMENTS—*Left hand at rest.*—1st, move the right hand horizontally to the right, as in Fig. 9, *dotted arms*; 2d, back to position. Repeat. Reverse movements are right hand held at rest, while the left hand is moving.

11th EXERCISE,

WRISTS AND ARMS.

Position as in Fig. 9, both arms extended in front, on a line with the shoulders.

MOVEMENTS—HANDS ONLY—*Left hand at rest.*—1st, turn the right hand at the wrist inward toward the chest; 2d, outward; 3d, left hand, same movement; repeat with each hand alternately, and vary by turning both hands at the same time.*

12th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 11, the left arm extended laterally and level with the shoulder, the right arm bent, the right hand against the chest, the band being horizontal.

MOVEMENTS—*Left arm at rest.*—1st, carry the right hand up and over the head down to the back of

* For this Exercise, I am indebted to Mr. Chas. F. Olney, Vice-Principal of Grammar School 26.

the neck, as shown by *dotted arm* Fig. 11 ; 2d, up over the head, forward and down again to position. Repeat. The reverse movements are right arm extended, and at rest, while the left hand is moving.



Fig. 3.

13th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 11, the left arm extended laterally and level with the shoulder, the right arm bent, the right hand against the chest.

MOVEMENTS—*The left arm at rest.*—1st, carry the right hand to the right shoulder ; 2d, pass the right hand across the chest to the left shoulder ; 3d, back again to the right shoulder. Repeat. Reverse movements are right arm extended and at rest, while the left arm is moving.

14th EXERCISE.

SHOULDERS AND ARMS.

Position as in Fig. 9, both arms being extended in front and level with the shoulders.

MOVEMENTS—*Left arm at rest*.—1st, bend the right arm inward, bringing the right hand up against the right shoulder; 2d, then out straight to position; 3d, bend the left arm inward, bringing the left hand against the left shoulder; 4th, straight out again to position. Repeat.

15th EXERCISE.

ARMS, SPINE AND CHEST.

Position as in Fig. 6, both arms extended downward, the band horizontal and in front.

MOVEMENTS—*The left hand at rest*.—1st, carry the right hand up over the head backward and down to the level of the left hand, following the line of the *dotted circle* in Fig. 10; 2d, up again over the head forward and down to position. Repeat. The reverse movements are right hand at rest, left hand moving.

16th EXERCISE.

ARMS AND ELBOWS.

Position as in Fig. 5, the left arm down, the right arm bent over the head, the band at the left side.

MOVEMENTS—*The left arm at rest*.—1st, straighten the right arm upward; 2d, bend the arm down to position. Repeat. The reverse movements are right arm down and at rest, the left arm bent over head and moving.

17th EXERCISE.

ARMS AND WRISTS.

Position as in Fig. 6, both arms extended down, the band in front.

MOVEMENTS—*The left hand at rest.*—1st, move the right hand horizontally to the right; 2d, back to position. Repeat. The reverse movements are right hand at rest, left hand moving.

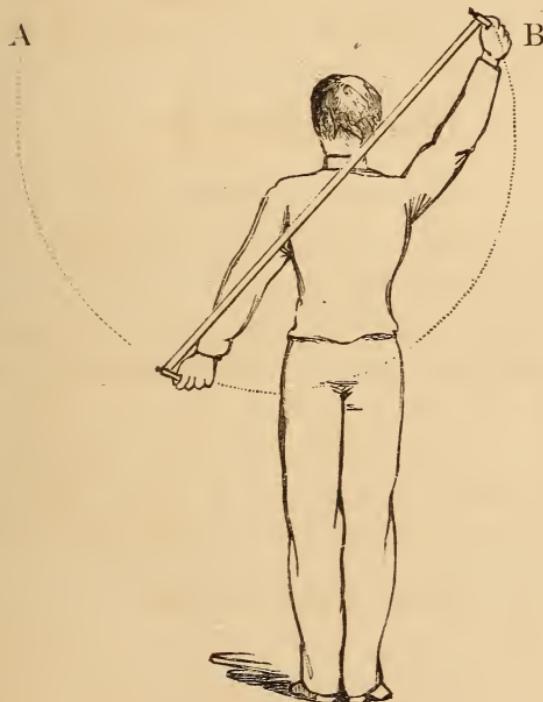


Fig. 4.

18th EXERCISE.

ARMS AND CHEST.

Position as in Fig. 2, both arms down at full length, the band behind.

MOVEMENTS—*Left hand at rest.*—1st, move the right

hand to the right; 2d, back to position. Repeat, Reverse, with right hand at rest, left hand moving.

19th EXERCISE.

ARMS AND ELBOWS.

Position as in Fig. 5, the right arm bent over the head, the left arm extended full length down at the side.

MOVEMENTS.—*The right arm at rest.*—1st, bend the left arm upward, as shown by *dotted arm B*, Fig. 5; 2d, straighten the left arm down again to position. Repeat. The reverse movements are with the left arm at rest, the right arm moving.

20th EXERCISE.

ELBOWS, WRISTS AND ARMS.

Position as in Fig 8, the left arm extended laterally and level with the shoulder, the right arm bent, its hand level with the shoulder, the band at the back of the neck.

MOVEMENTS—*The left arm at rest.*—1st, move the right hand to the back of the head as shown by *dotted arm B*, Fig. 8; 2d, move the right hand back to position. Repeat. The reverse movements are the right arm extended and at rest, while the left arm is moving.

21st EXERCISE.

CHEST AND SHOULDERS.

Position as in Fig. 2, both arms down at full length, the band held behind and horizontal.

MOVEMENTS—*Both hands.*—1st, carry the band up over the head as in Fig. 1, *dotted arms*; 2d, down again to position, stretching the band as it passes the shoulders. Repeat.

22d EXERCISE.

SHOULDERS AND CHEST.

Position as in Fig. 1, holding the band horizontally across the chest, both hands being against the shoulders.

MOVEMENTS—*Both hands.*—1st, carry the band up over the head down to the back of the neck, as shown by Fig. 2, *dotted arms*; 2d, back again to position. Repeat.



Fig. 5.

23d EXERCISE.

ELBOWS AND SHOULDERS.

Position as in Fig. 6, both arms down at full length, the band held in front and horizontal.

MOVEMENTS—Both arms.—1st, raise both arms, extending them in front level with the shoulders, as shown by Fig. 9; 2d, bend both arms, bringing the hands up to the shoulder, as shown in Fig. 1; 3d, extend the arms again out in front of the body; 4th, down to position. Repeat.

24th EXERCISE.

ARMS AND WRISTS.

Position as in Fig. 9, both arms extended in front of the body, and on a level with the shoulders.

MOVEMENTS—Both hands.—1st, bend both hands at the wrists, turning the palms of the hands downward facing toward the chest; 2d, turn both hands upward, the palms turning outward. Repeat.

25th EXERCISE.

CHEST, SHOULDERS AND ARMS.

Position as in Fig. 12, *dotted arms* B, both arms extended laterally on a line with the shoulders, the band at the back of the neck.

MOVEMENTS—Both arms.—1st, raise the right arm, at the same time lowering the left arm, as in Fig. 4; 2d, lower the right arm, at the same time raising the left arm. Repeat. These movements should be continued like a “see-saw,” following the part of the circle from B to A, and from A to B, Fig. 4.

26th EXERCISE.

ELBOWS AND ARMS.

Position as in Fig. 13, the hands at the waist, the band held in front.

MOVEMENTS—Both hands.—1st, carry the band up to the chest, as in Fig. 1; 2d, move both hands down again to position. Repeat.

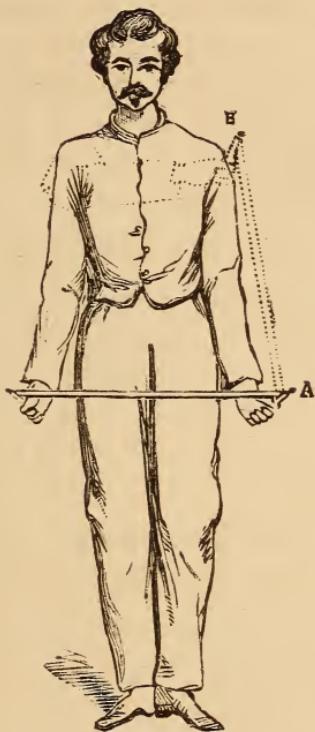


Fig. 6.

27th EXERCISE.

SHOULDERS, ELBOWS AND ARMS.

Position as in Fig. 14, the left arm extended obliquely upward, the right arm down full length at the side.

MOVEMENTS—*The left arm at rest.*—1st, bend the right arm up in front, bringing the right hand up against the right shoulder, as in Fig. 18; 2d, straighten the right arm out in front on a level with the shoulder; 3d, down again to position. Repeat. Reverse, with the right arm at rest, and left arm moving.

28th EXERCISE.

SHOULDERS AND ARMS.

Position as in Fig. 10, the left arm extended obliquely upward in front, the right arm extended down at the side.

MOVEMENTS—*The left arm at rest*.—1st, carry the right arm from its side, the right hand, following the *dotted circle* up to C, as shown in Fig. 10, the arm, in describing this half circle, being kept perfectly straight; 2d, bring the arm down again to position, following the same line in descending. Repeat. Reverse, with the right arm at rest and left arm moving.

29th EXERCISE.

SHOULDERS AND ARMS.

Position as in Fig. 6, both arms down at full length, the band being in front.

MOVEMENTS—*The left arm at rest*.—1st, extend and raise the right arm laterally, the right hand following the *dotted lines* up to A in Fig. 14; 2d, carry the right hand down again, following the same lines to position, the arm being straight in these movements. Repeat.

30th EXERCISE.

CHEST, AND SHOULDERS.

Position as in Fig. 13, both hands at the waist, holding the band in front.

MOVEMENTS—*Both hands*.—1st, carry the band up to and over the head, to the back of the neck, as in Fig. 2, *dotted arms*; 2d, up over the head forward and down again to position.

31st EXERCISE.

ARMS, SHOULDERS AND ELBOWS.

Position as in Fig. 13, both arms bent, the band held at the waist.

MOVEMENTS—*Left hand at rest.*—1st, move the right hand to the right, as shown by dotted lines A; 2d, back again to position. Repeat. Reverse, with right hand at rest, left hand moving.



Fig. 7.

32d EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 15, the left arm extended obliquely downward in front, the right arm bent, the right hand over the back of the head, the left handle

held perpendicularly, the right handle held horizontally.

MOVEMENTS—*Left arm at rest.*—1st, carry the right hand from the line of the back of the head from B, following the dotted line forward to C; 2d, move the right hand backward to position. Repeat. Reverse, with right arm extended and at rest, the left hand moving.

33d EXERCISE.

CHEST, SHOULDERS AND ARMS.

Position as in Fig. 2, both arms down at full length, the band held behind.

MOVEMENTS—*Left arm at rest.*—1st, raise the right arm to a level with its shoulder and extend it laterally, level with the shoulder, as shown by *dotted arms* of Fig. 3; 2d, carry it down again to position. Repeat. Reverse, with the right arm at rest and left arm moving.

34th EXERCISE.

ARMS AND ELBOWS.

Position as in Fig. 1, *dotted arms*, both arms bent, the elbows on a line with the shoulders, the band over head.

MOVEMENTS—*Left arm at rest.*—1st, straighten the right arm out sideways on a level with its shoulder, as in Fig. 8, *dotted lines A*; 2d, bend the right arm up again to position. Repeat. Reverse, with right arm at rest and left arm moving.

35th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 16, both arms extended obliquely upward.

MOVEMENTS—*Left hand at rest.*—1st, move the right hand to the right; 2d, move the right hand back again to position. Repeat. Reverse, with right hand at rest, left hand moving.

36th EXERCISE.

SHOULDERS AND CHEST.

Position as in Fig. 16, both arms extended obliquely upward.

MOVEMENTS—*Both hands.*—1st, carry the band overhead to the back of the neck, as in Fig. 2, *dotted arms*; 2d, back over the head forward to position. Repeat.



Fig. 8.

• 37th EXERCISE.

• ARMS, WRISTS AND SHOULDERS.

Position as in Fig. 16.

MOVEMENTS.—*Left hand at rest.*—1st, turn the right hand to the right, so that the palm faces upward, the right handle will in this movement be brought almost horizontal and pointing to the right, and the end of the band will pass across the right thumb, as shown in Fig. 20, *hands B*; 2d, back to position, as shown by dotted hands. Repeat. Reverse, with right hand at rest, left hand turning.

38th EXERCISE.

ARMS, WRISTS AND SHOULDERS.

Position as in Fig. 16.

MOVEMENTS.—The same movements as in the 37th Exercise, excepting that in this exercise both hands move at the same time, the left hand turning to the left, the handle pointing to the left, and the right hand to the right, as in Fig. 20. Repeat.

39th EXERCISE.

SHOULDERS AND ARMS.

Position as in Fig. 16, both arms obliquely upward, position of hands as in Fig. 20, *hands B*.

MOVEMENTS.—1st, move the right hand to the right; 2d, back to position. Repeat. Reverse, with right hand at rest, and left hand moving.

40th EXERCISE.

CHEST, SHOULDERS AND ARMS.

Position as in Fig. 14, the left arm extended ob-

liquely upward at the side, the right arm down full length.

MOVEMENTS—*The left arm at rest.*—1st, carry the right arm from its side straight out in front, straight upward, backward and down, the right hand describing the complete circle at the side, as shown by the dotted circle in Fig. 10; the band will be thus brought behind and obliquely across the back; 2d, carry the arm upward, forward, and down to position, following the same circle forward, and keeping the arm always extended. Repeat. Reverse, with the right arm extended and at rest, the left arm moving.



Fig. 9.

41st EXERCISE.

CHEST, SHOULDERS AND WRISTS.

Position as in Fig. 2, both arms down at full length,

the *band behind*; the handles should in this exercise be held obliquely, as in Fig. 6; this will bring each end of the band across the knuckle joints of the first fingers.

MOVEMENTS—Left hand at rest.—1st, move the right hand horizontally to the right; 2d, bring the hand back again to position. Repeat. Reverse, with right hand at rest, left hand moving.

42d EXERCISE.

CHEST AND ARMS.

Position as in Fig. 17, the band passing across the back just below the shoulders, the left arm extended in front, the right arm bent, the right hand up to the shoulder.

MOVEMENTS—Right arm at rest.—1st, bend the left arm, bringing the left hand up to the left shoulder; 2d, extend the arm out again to position. Repeat. Reverse, left arm at rest, right arm moving.

43d EXERCISE.

ARMS AND SHOULDERS.

Position the same as in Fig. 17, excepting that, instead of the left arm being in front of the body, it is extended laterally.

MOVEMENTS—Right arm at rest.—1st, bend the left arm, bringing the left hand up to the left shoulder; 2d, out again to position. Repeat. Reverse with left arm at rest, right arm moving.

44th EXERCISE.

CHEST, SPINE AND ARMS.

Position as in Fig. 2, *dotted arms*, both arms bent,

elbows level with the waist, the band at the back of the neck.

MOVEMENTS—*Each arm alternating.*—1st, lower the right arm, extending it obliquely downward, as shown by the *lower arm* of Fig. 4; 2d, carry it up again to position; 3d, drop the left arm in same manner; 4th, carry it up again to position. Repeat.

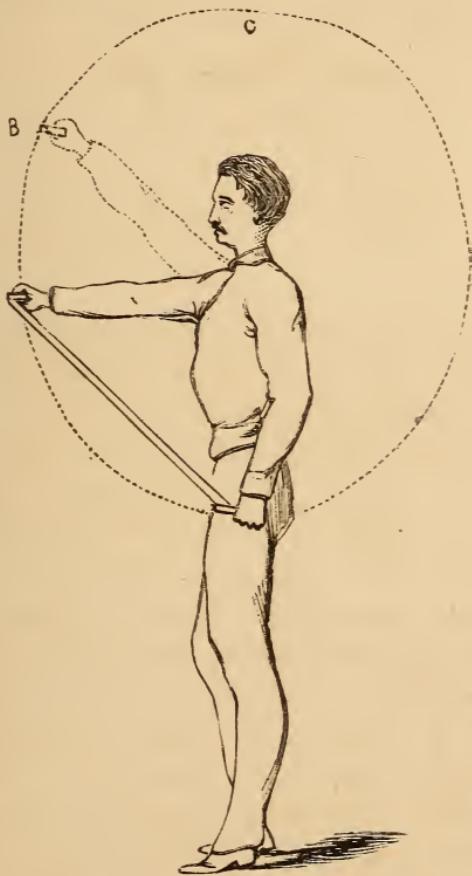


Fig. 10.

45th EXERCISE.

ARMS AND ELBOWS.

Position as in Fig. 12, *dotted arms A*, both arms

extended obliquely at the sides, the band being in front.

MOVEMENTS—*The left arm at rest.*—1st, bend the right arm upward, carrying the right hand close up to the shoulder; 2d, down again to position. Repeat. Reverse, with the right arm at rest, the left arm moving.

46th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 15, the right arm bent, the right hand over the head, holding the handle horizontal, the left arm extended in front of the body, level with the shoulder, as in Fig. 15, *dotted arm A*.

MOVEMENTS—*Both hands moving at same time.*—1st, the left hand moving downward, while the right moves upward; 2d, both hands back to position. Repeat.

47th EXERCISE.

WRISTS AND SHOULDERS.

Position as in Fig. 15, the right arm bent, the right hand over the head, holding the handle horizontal, the left arm extended in front of the body, on a level with the shoulder, as in Fig. 15, *dotted arm A*.

MOVEMENTS—*The left arm at rest.*—1st, turn the right hand, so that the right handle is brought from the horizontal to the perpendicular; 2d, back to position. Repeat. Reverse, with the left hand over head, the right arm extended, and at rest.

48th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 15, the left arm bent, the left

hand over head, holding the handle *perpendicularly*, the right arm extended in front of the body, level with the shoulder, as in *dotted arm A*, Fig. 15.

MOVEMENTS—*The left arm at rest.*—1st, lower the right arm to a level with the waist, keeping it extended; 2d, raise the right arm so that the right hand is brought level with the forehead. Repeat. Reverse with right arm at rest, left arm extended and moving.



Fig. 11.

49th EXERCISE.

SHOULDERS, ELBOWS AND ARMS.

Position as in Fig. 15, the left arm bent, the left hand over head holding the handle *horizontal*, the

right arm extended level with its shoulder, as in *dotted arm A*, Fig. 15.

MOVEMENTS—*The right arm at rest.*—1st, pass the left hand over the head laterally to a line with the right ear; 2d, over the head laterally, and down to the left shoulder; the hand in this exercise will pass in the direction from shoulder to shoulder. Repeat. Reverse, with the right arm bent over head, and left hand moving.

50th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 6, both arms down at the sides, the band being in front.

MOVEMENTS—*The left arm at rest.*—1st, raise the right arm extended, up to a level with the shoulder; 2d, bend the right arm, bringing the right hand up against the right shoulder; 3d, straighten the arm again; 4th, lower it again to position. Repeat. Reverse, with right arm at rest, left arm moving.

51st EXERCISE.

SHOULDERS AND ARMS.

Position as in Fig. 14, the left arm extended obliquely upward, the right arm down at the side.

MOVEMENTS—*Both hands.*—1st, raise the right hand and lower the left, following the *dotted circle* from A to B and from B to A, Fig. 14; 2d, raise the left and lower the right. Repeat in continuous movement.

52d EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 18, the left arm extended later-

ally, the right arm bent, the right hand against its shoulder.

MOVEMENTS—*Left arm at rest*.—1st, carry the right hand obliquely down across the chest to the waist, on a line with the left shoulder, as in *dotted arm and band* B, Fig. 18; 2d, carry the right hand up obliquely across the chest to position. Repeat. Reverse, with the right arm extended and at rest, left arm moving.

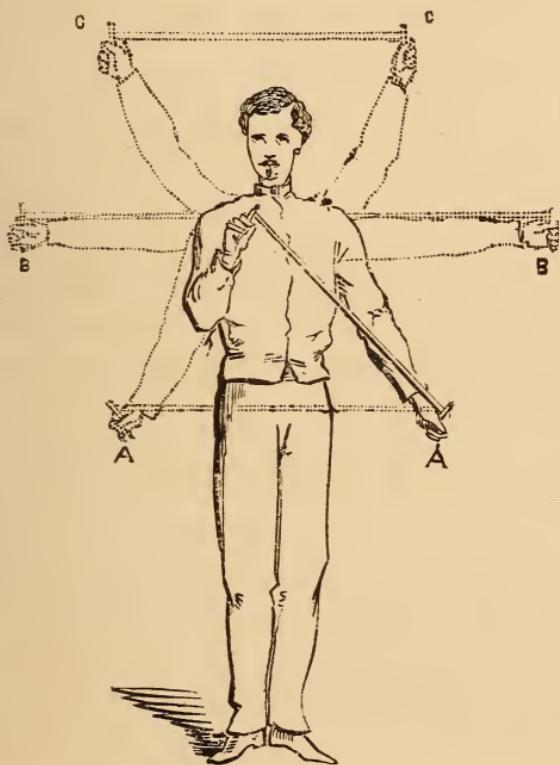


Fig. 12.

53d EXERCISE.

SHOULDERS AND ARMS.

Position as in Fig. 5, the left arm extended down at the side, the right arm bent over the head.

MOVEMENTS—*The left arm at rest.*—1st, carry the right hand forward, and down to the left shoulder; 2d, carry it up again to position. Repeat. Reverse, with left arm up, right arm down and at rest.

54th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 16, *dotted arms B*, both arms extended upward.

MOVEMENTS—*The left arm at rest.*—1st, carry the right arm extended down to a level with its shoulder; 2d, bend the arm, carrying the right hand across the chest to the waist at the left side, as shown by *dotted arm and band C*, Fig. 16; 3d, carry the right hand up and across the chest, extending the arm as before; 4th, raise the arm to position. Repeat. Reverse with right arm at rest, the left arm moving.

55th EXERCISE.

ARMS, ELBOWS AND SHOULDERS.

Position as in Fig. 6, both arms extended down the band in front.

MOVEMENTS—*Both hands.*—1st, each hand moving laterally in opposite directions; 2d, back to position. Repeat.

56th EXERCISE.

CHEST AND ARMS.

Position as in Fig. 2, both arms extended down, the band behind.

MOVEMENTS—*Both hands alternating.*—1st, raise the right hand, carrying it up against the right shoulder blade; 2d, down again to position; 3d, raise the

left hand up to the left shoulder blade; 4th, down to position. Repeat.

57th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 9, both arms extended in front on a level with the shoulders.

MOVEMENTS—*Both hands*.—1st, both hands moving laterally in opposite directions, as shown by *dotted arms*; 2d, back to position. Repeat.

58th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 9, both arms straight out in front and level with the shoulders.

MOVEMENTS—*Both hands alternating*.—1st, move the right hand to the right; 2d, back to position; 3d, move the left hand to the left; 4th, back to position. Repeat.

59th EXERCISE.

CHEST, ARMS AND SHOULDERS.

Position as in Fig. 12, *dotted arms B*, both arms extended laterally level with the shoulders.

MOVEMENTS—*Both arms*.—1st, raise both arms as shown in *dotted arms C*, Fig. 12; 2d, lower both arms to position. Repeat.

60th EXERCISE.

ARMS, SHOULDERS AND SPINE.

Position as in Fig. 1, *dotted arms*, both arms bent, the elbows on a line with the shoulders.

MOVEMENTS—*Both arms alternating*.—1st, lower

the right arm, bringing the elbow on a line with and against the waist, as in *dotted arm B*, Fig. 5; 2d, raise the right arm and lower the left, bringing the elbow on a line with the waist. In these movements both hands describe the half circle as shown from *dotted arm B* to *dotted arm A*, and vice-versa.

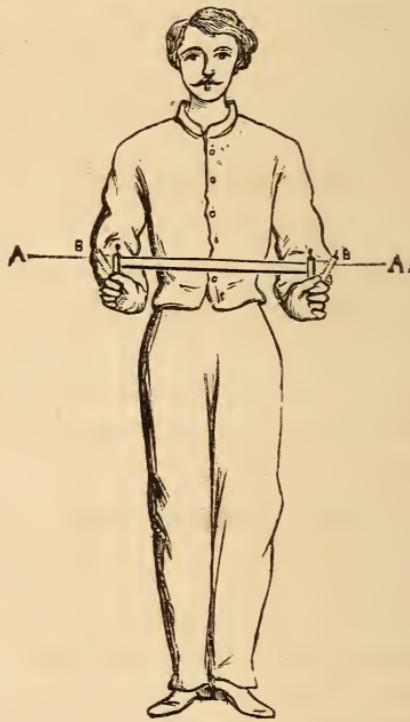


Fig. 13.

61st EXERCISE.

CHEST AND ARMS.

Position as in Fig. 2, *dotted arms*, both arms bent, the band at the back of the neck.

MOVEMENTS—*Both hands.*—1st, move both hands to the right; 2d, move both hands to the left; 3d, back to position. Repeat.

62d EXERCISE.

ARMS.

Position as in Fig. 1, both arms bent, the hands close up to the shoulders, holding the band horizontally across the chest.

MOVEMENTS—*Left hand at rest.*—1st, move the right hand laterally away from the left hand to the outside line of the dotted elbow; 2d, back to position. Repeat. Reverse, with right hand at rest, and left hand moving.

63d EXERCISE.

ARMS AND CHEST.

Position as in Fig. 1, both arms bent, the hands close to the shoulders, holding the band across the chest.

MOVEMENTS—*Both hands.*—1st, move both hands in opposite directions, extending both arms laterally; 2d, bend both arms back to position.

64th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig 19, the left arm at the left side, the right arm bent, the right hand against the chest, the band held obliquely.

MOVEMENTS—*The left hand at rest.*—1st, carry the right hand up above the head, keeping the arm bent as in *dotted arm*, Fig. 19; 2d, down again to position. Repeat.

65th EXERCISE.

ARMS AND CHEST.

Position as in Fig. 2, both arms down at full length, holding the band behind.

MOVEMENTS—*Both arms alternately.*—1st, raise the right hand to the right shoulder, as in Fig. 3; 2d, straighten the right arm upward, as in Fig. 4; 3d, bring the right hand down again to the shoulder; 4th, down to position; 5th, raise the left hand to the left shoulder, 6th, straighten the left arm upward; 7th, down to the shoulder; 8th, down to position. Repeat.

66th EXERCISE.

SPINE, ARMS, SHOULDERS AND CHEST.

Position as in Fig. 6, both arms down at full length, the band in front.

MOVEMENTS—*Both arms alternating.*—1st, carry the right hand up over the head, backward, and down to the level of the left hand, as in Fig. 2; 2d, raise the left hand, carry it over the head, forward, and down to position, each hand moving in quick succession. Repeat.

67th EXERCISE.

ARMS, ELBOWS, AND CHEST.

Position as in Fig. 2, *dotted arms*, both arms bent, the band across the back of the neck.

MOVEMENTS—*The left arm at rest.*—1st, extend the right arm laterally on a level with its shoulder; 2d, back to position; 3d, extend the left arm laterally on a level with its shoulder; 4th, back to position. Repeat.

68th EXERCISE.

SPINE, CHEST AND ARMS.

Position as in Fig. 2, *dotted arms*, both arms bent, the band across the back of the neck.

MOVEMENTS—*Both arms alternating.*—1st, drop the right arm as in Fig. 3; 2d, bring it up again to posi-

tion; 3d, drop the left arm; 4th, raise it again to position. Repeat, each arm moving in quick succession.

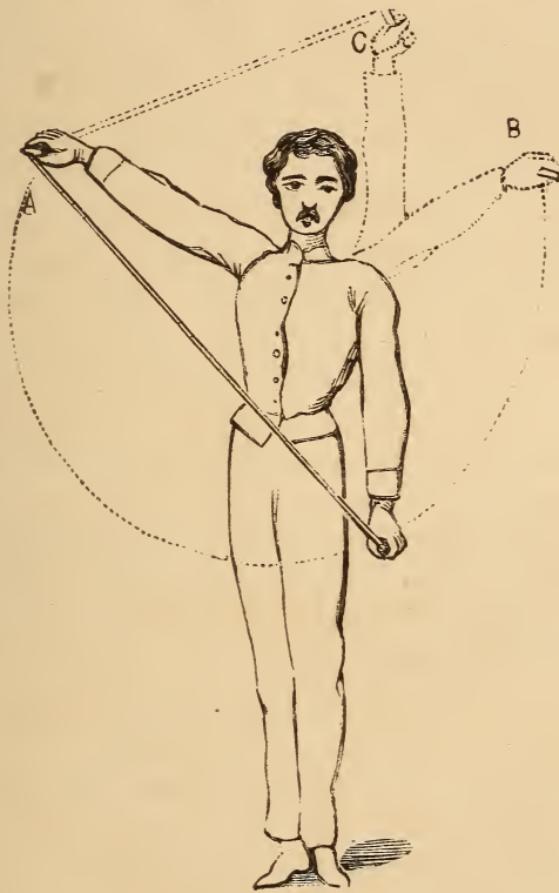


Fig. 14.

69th EXERCISE.

WRISTS, ELBOWS AND ARMS.

Position as in Fig. 6, both arms down at full length, the band in front.

MOVEMENTS—*Both hands.*—1st, move the right hand to the right, and the left hand to the left; 2d, back again to position.

70th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 12, *dotted arms A*, both arms extended obliquely down, the band in front.

MOVEMENTS—*The left hand at rest*.—1st, carry the right hand up to and against the right shoulder; 2d, carry it upward, bending the arm as shown in Fig. 19, *dotted arm*; 3d, straighten the arm obliquely upward, as in Fig. 4; 4th, bend the arm as in Fig. 19, *dotted arm*; 5th, bring the right hand again down to the shoulder; 6th, down to position. Repeat.

71st EXERCISE.

ARMS.

Position as in Fig. 9, both arms extended in front, level with the shoulders.

MOVEMENTS—*Both hands*.—1st, bring both hands toward the chest, stretching the band until the arms extend almost laterally; 2d, relaxing the band back to position. Repeat.

72d EXERCISE.

SHOULDERS AND ARMS.

Position as in Fig. 12, both arms down obliquely, the band in front.

MOVEMENTS—*Both hands alternating*.—1st, raise the right hand to the forehead, as in Fig. 7; 2d, down again to position; 3d, raise the left hand to the forehead; 4th, down again to position. Repeat.

73d EXERCISE.

SPINE, CHEST AND ARMS.

Position as in Fig. 2, both arms down at full length, the band behind.

MOVEMENTS—*Left hand at rest*.—1st, raise the right

hand, carrying it over the head, as in Fig. 5; 2d down again to position. Repeat. Reverse, with the right hand at rest, left hand moving.



Fig. 15.

74th EXERCISE.

ARMS AND ELBOWS.

Position as in Fig. 6, both arms down at full length, the band being in front.

MOVEMENTS—*Left hand at rest.*—1st, carry the right hand obliquely across the chest to the left shoulder, as in *dotted arm*, Fig. 6; extend the arm in front on a line with the shoulder, as in Fig. 10; 3d, back to the shoulder; 4th, down to position. Repeat.

75th EXERCISE.

ARMS AND ELBOWS.

Position as in Fig. 1; both hands close to the shoulders, the band across the chest.

MOVEMENTS—*Both hands*.—1st, carry the band up over the head, as in Fig. 1, *dotted arms*; 2d, down to position; 3d, extend both arms in front, as in Fig. 9; 4th, back to position. Repeat.

76th EXERCISE.

ARMS.

Position as in Fig. 13, both arms at the side, the band at the waist and in front.

MOVEMENTS—*Both hands*.—1st., carry the band up from the waist to the forehead, stretching the band in the movement so that it is at the greatest tension when passing the chest, each hand describing a semi-circle at the side from the waist to the forehead; 2d, down again to position, with the same movements. Repeat.

77th EXERCISE.

SPINE, CHEST, SHOULDERS AND ARMS.

Position as in Fig. 2, both arms down at full length, the band behind.

MOVEMENTS—*Both hands*.—1st, carry the band up over the head forward and down to the waist, stretching the band in its upward movement, and relaxing as it goes down to the waist; 2d, up over the head backward and down to position.

78th EXERCISE.

SHOULDERS.

Position as in Fig. 16, both arms obliquely upward in front.

MOVEMENTS—*The left arm at rest.*—1st, move the right arm backward until it reaches the perpendicular as shown by *dotted arm B*, Fig. 16; 2d, forward and down to position. Repeat.



Fig. 16.

79th EXERCISE.

ARMS AND SHOULDERS.

Position—Both arms bent, the band held horizontally in front, and level with the forehead.

MOVEMENTS—*Both hands alternating.*—1st, move the right hand to the right; 2d, back to position; 3d, move the left hand to the left; 4th, back to position. Repeat.

80th EXERCISE.

ARMS AND SHOULDERS.

Position as in 79th exercise.

MOVEMENTS—*Both hands*.—1st, move both hands laterally, in opposite direction; 2d, back to position. Repeat.

81st EXERCISE.

SHOULDERS AND ARMS.

Position as in Fig. 16, *dotted arms* B, both arms extended upward.

MOVEMENTS—*Both arms alternating*.—1st, carry the right arm extended in front down to a level with the shoulder; 2d, bend the arm carrying the right hand across the chest to the waist at the left side, as shown by *dotted arm* C, Fig. 16; 3d, carry the right hand up and across the chest, extending the arm on a level with the shoulder; 4th, up to position; 5th, lower the left arm, extended, down to a level with the shoulder; 6th, bending the arm, carry the left hand across the chest to the waist at the right side; 7th, raise the left hand across the chest, extending the arm level with the shoulder; 8th, up to position. Repeat.

82d EXERCISE.

SPINE, ARMS, AND CHEST.

Position as in Fig. 2, both arms down at full length, the band behind.

MOVEMENTS—*Both hands alternating*.—1st, raise the right hand, carrying it over the head as in Fig. 5; 2d, down again to position; 3d, raise the left hand, carrying it over the head; 4th, down again to position, Repeat.

83d EXERCISE.

ARMS, SHOULDERS AND ELBOWS.

Position as in Fig. 12, *dotted arms A*, both arms obliquely down at the sides; the band in front.

MOVEMENTS—*Both hands alternately*.—1st, carry the right hand obliquely across the chest to the left shoulder, as in Fig. 6, *dotted arm*; 2d, extend the arm in front on a line with the shoulder, as in Fig. 10; 3d, back to the shoulder; 4th, down to position; 5th, carry the left hand across the chest to the right shoulder, as in Fig. 6, *dotted arm*; 6th, extend the arm; 7th, back to the shoulder; 8th, down to position. Repeat.

84th EXERCISE.

SHOULDERS, SPINE, ARMS AND CHEST.

Position as in Fig. 5, the right arm raised, the left arm lowered.

MOVEMENTS—*Both arms*.—1st, carry the right hand over the head, with the right arm bent, and the left arm extended down; bringing the right hand forward over the head and down as in Fig. 12, *dotted arms A*, raising the left hand, carry it across the chest, over the head and down behind, as in Fig. 2. Repeat, each hand following the other in continuous movement.

85th EXERCISE.

SHOULDERS.

Position as in Fig. 16, both arms obliquely upward.

MOVEMENTS—*Both arms alternating*.—1st, move the right arm backward till it reaches the perpendicular, as shown by *dotted arms B*, Fig. 16; 2d, forward to position; 3d, move the left arm backward till it

reaches the perpendicular; 4th, forward to position.
Repeat.



Fig. 17.

86th EXERCISE.

SHOULDERS, CHEST AND ARMS.

Position as in Fig. 12, *dotted arms* C. both arms raised full length.

MOVEMENTS—Both hands.—1st, carry the band down to the shoulders as in Fig. 2, *dotted arms*; 2d, extend the arms full length downward as in Fig. 2; 3d, up to the shoulders as in *dotted arms* Fig. 2; 4th, up to position. Repeat.

87th EXERCISE.

ARMS AND ELBOWS.

Position as in Fig. 11, the left arm extended lat-

erally, the right arm bent, with hand up against the shoulder.

MOVEMENTS—*Right arm at rest.*—1st, bend the left arm, bringing the left hand level with the shoulder; 2d, out again to position. Repeat, and reverse with left arm at rest, right arm moving.



Fig. 18.

88th EXERCISE.

ARMS, ELBOWS AND WRISTS.

Position as in Fig. 13, *dotted handles* B, the band at the waist, the handles pointing obliquely upward.

MOVEMENTS—*Both hands.*—1st, move the right hand to the right, and the left hand to the left; 2d, back to position. Repeat.

89th EXERCISE.

ARMS.

Position as in Fig. 18, *dotted hands A*, the left arm extended obliquely upward at the side, the right arm bent, the right hand at the waist.

MOVEMENTS.—*Right arm at rest.*—1st bend the left arm to a level with the forehead; 2d, out again to position. Repeat. Reverse, with left arm at rest, right arm moving.

90th EXERCISE.

ARMS AND SHOULDERS.

Position as in Fig. 12, *dotted lines A A*, both arms down obliquely at the sides, the band in front.

MOVEMENTS.—*Both hands alternating.*—1st, raise the right hand to the right shoulder; 2d, extend the arm upward obliquely, following the *dotted right arm C*, Fig. 12; 3d, lower the hand to the shoulder; 4th, down to position; 5th, raise the left hand to the shoulder, reversing the band; 6th, extend the arm obliquely upward, following the *dotted left arm C*, Fig. 12; 7th, down to the shoulder; 8th, down to position. Repeat.

91st EXERCISE.

CHEST, SHOULDERS AND ARMS.

Position as in Fig. 12, *dotted arms C*, both arms extended upward.

MOVEMENTS.—1st, carry the band down to the chest; 2d, up to position. Repeat.

92d EXERCISE.

SHOULDERS, ELBOWS AND ARMS.

Position.—The right arm bent, the right hand at

the back of the head, the left arm down at the left side.

MOVEMENTS—*The left arm at rest.*—1st, extend the right arm upward; 2d, down to position. Repeat. Reverse, with right arm down, left arm moving.



Fig. 19.

93d EXERCISE

SHOULDERS AND ARMS.

Position as in Fig. 16, both arms extended obliquely upward in front.

MOVEMENTS—*Both arms.*—1st, bend both arms, bringing the band down in front of the forehead, stretching the band as it reaches the forehead; 2d,

back to position, relaxing the band in the upward movement. Repeat.

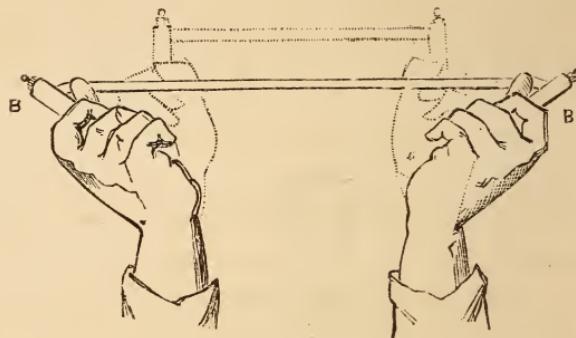


Fig. 20.

94th EXERCISE.

SHOULDERS, SPINE AND ARMS.

Position as in Fig. 4, the right arm raised, the left arm lowered, the band passing obliquely across the back.

MOVEMENTS—*Both arms.*—1st, swing the left arm backward while the right arm is brought in front, pointing obliquely upward: 2d, lower the right hand in front to a level with the waist, at the same time raising the left arm bent, bringing the left hand above the head, the body inclining slightly forward; 3d, lower the left hand and raise the right, the body inclining very slightly backward; 4th, swing the arms back to position. Reverse, with right arm lowered and left arm raised.

95th EXERCISE.

CHEST, SPINE AND ARMS.

Position as in Fig. 4, the right arm raised, the left arm lowered, the band passing obliquely across the back.

MOVEMENTS—Both arms.—1st, swing the left arm backward while the right arm is brought almost in front, pointing obliquely upward, the body turning slightly to the left; 2d, back to position. Repeat. Reverse, with left arm raised and right arm lowered.

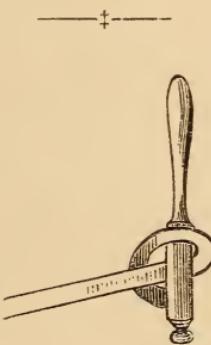
96th EXERCISE.

ARMS.

For this exercise shorten the band at both ends as described below.

Position as in Fig. 1; now drop the left hand, bringing the band perpendicular.

The MOVEMENTS are, raising and lowering the right hand. Repeat, and reverse, with left hand up and right hand down.



To Shorten the Band.

When the apparatus is not sufficiently heavy in its action for some of the exercises, as for example "The Health Lift," "The Pulleys," &c., more weight or strain may be added by shortening the band. This is done by holding one of the handles *upside down*, in the left hand, make a loop by twisting the band near the handle, and passing the loop over the longest part of the handle, that is, the part usually grasped, as shown by the above cut.

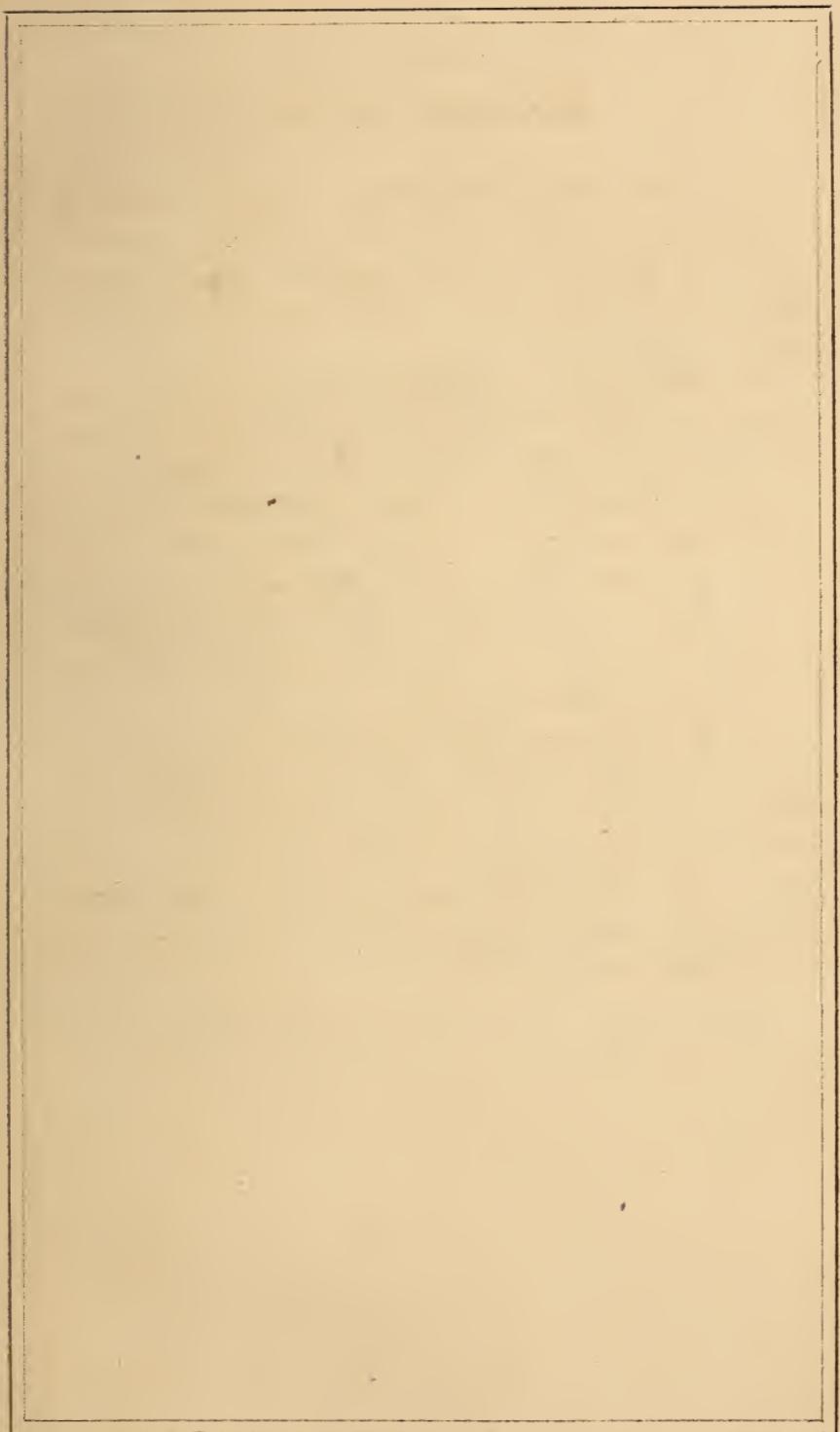
SECOND SERIES.

THE EXERCISES IN THIS SERIES, THOUGH BRINGING INTO PLAY THE VARIOUS MUSCLES, ACT ALSO DIRECTLY UPON THE NERVOUS SYSTEM; SOME OF THEM THROUGH THE GREAT SYMPATHETIC NERVE AND BASE OF THE BRAIN.

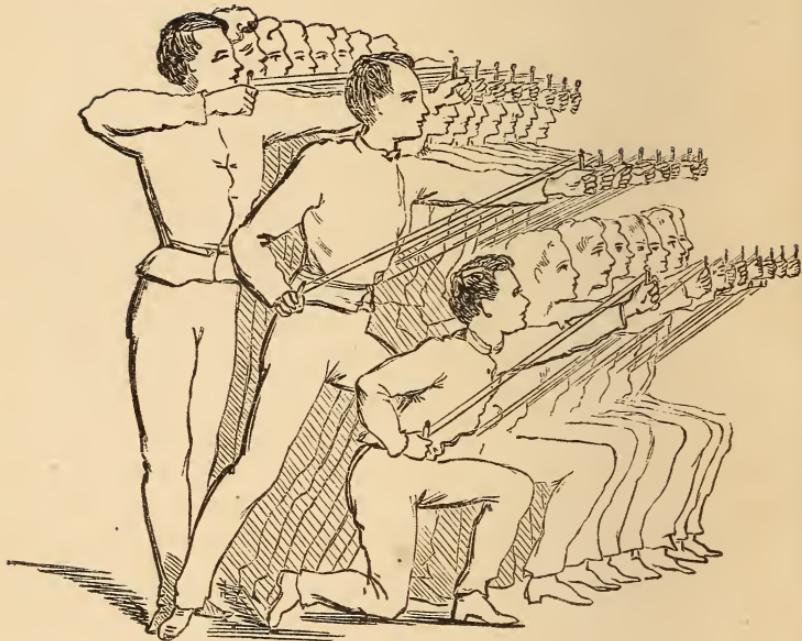
The movements are to be made *very slowly*—so slowly, in fact, that the movements of the hands are almost imperceptible, and should be continued according to the strength of the person exercising. It is best to use any of them alternately with some of the exercises of the first series, and when used with music, a “Tremolo,” or very slow tremulous music assimilates best to the movements. The handles should be *grasped tightly*.

For this series select the following exercises:—

2d, 4th, 5th, 7th, 9th, 10th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 23d, 26th, 27th, 28th, 29th, 32d, 34th, 35th, 39th, 40th, 42d, 43d, 44th, 45th, 46th, 48th, 50th, 51st, 52d, 53d, 54th, 56th, 57th, 58th, 59th, 62d, 63d, 64th, 67th, 70th, 71st, 76th, 78th, 90th, and 96th.



[2d Frontispiece.]



**FORMING THE HOLLOW SQUARE.
TO RESIST A CAVALRY CHARGE.**

See page 104.

TABLEAUX.

It will be seen that nearly all of the First Series—the postures, combined exercises and Tableaux—can, by a little taste and judgment, be so varied and arranged as to present beautiful scenic effects for parlor, open air or school entertainments. A very pretty effect is given to the movements by decorating the handles of the apparatus, tying a small bouquet, flower, ribbon or flag around the tops, the colors being variegated and arranged to show to the greatest advantage in blending.

The various exercises, postures, &c., can be increased and diversified more fully than is illustrated in this work. A little familiarity with the use of the apparatus will cause many new movements and figures to suggest themselves.

The TABLEAUX should be formed by such as take part in it remaining *perfectly* immovable until the signal note indicates "*change*." This rule should also be observed in the combined postures and exercises, the whole class moving as one person. This, of course, can only be done with precision after a few rehearsals. The posturing and combination of figures may, if so desired, be without movements. The "*change*" from one to another in that case will be all the action necessary.

See Instructions to Teachers, Class Exercises, &c., pages 99, 100, 101.

THIRD SERIES.**THE HEALTH LIFT****TRUNK, HEAD, NECK, ARMS AND LEGS.**

This exercise is the same as the celebrated "Lift Cure," with the advantage that IT DOES NOT NECESSITATE A VAST AMOUNT OF EXERTION IN A CONSTRAINED AND AWKWARD POSITION, and will be found to accomplish *all that is desired by the most ardent votary of the famous "Lifting Cure,* of which so much has been said and written.

MODE OF USE.

Take two expanders, place one handle of each on

the floor, the long parts of the handles lying against the heel of the boot, and the pins or upper parts of the handles lying against the soles ; this will bring the ends of the bands passing underneath the hollow or instep of the feet, as shown by the engraving, and by keeping the feet down, the handles will remain fixed in position, though the feet can, if desired, be slid along the floor. The feet may be either spread apart, as shown in the figure, or kept close together.

The movements are, bending the body and knees, with the band slightly taut. This will bring a hand level with and against each knee. Now slowly raise the body to the perpendicular, and continue to raise the hands up to the lower part of the chest ; then, with the same movements, lower the hands, and gradually bend the body to the starting point ; or, by inclining the body to one side, we raise one hand and lower the other. *When more force is required,* the band may be shortened, as explained on page 69.

THE PULLEYS.

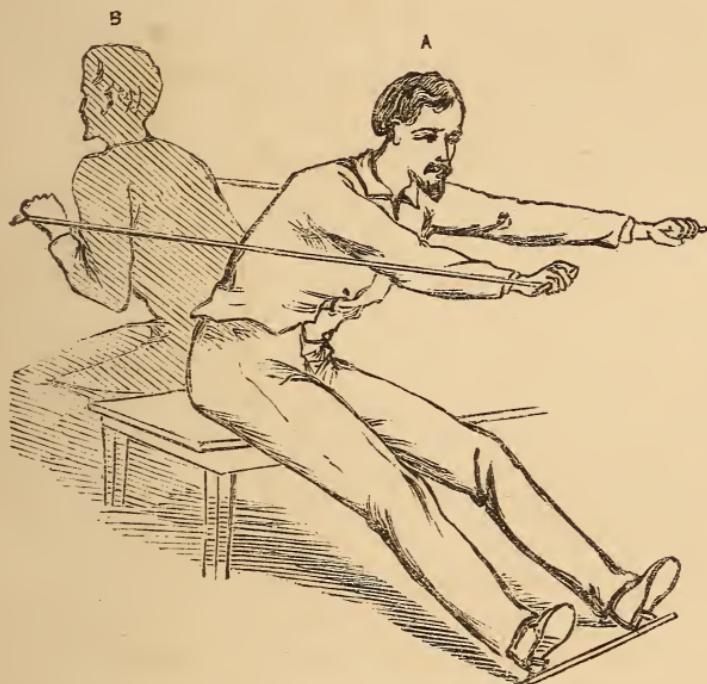


SPINE, CHEST, SHOULDER AND ARMS.

To perform this exercise, it is necessary to have two rings fixed in the door frame, wall, or other convenient spot, the rings being perpendicular, as shown in the cut. The handles should be passed entirely through, and then drawn close against the rings. The handles will thus rest against one side of the rings, while the bands will pass out of the other, as shown in the engraving. The movements are, extending and bending the arm or arms either both together, or alternately, and, if desired, raising and bending the body to correspond with the arm movements. This exercise may also be performed with the face toward the rings, and going through the same movements,

either slow or fast, this will be just the same as SAWING WOOD.

ROWING THE BOAT.



SPINE, CHEST, LEGS AND ARMS, HEAD AND NECK EXERCISE.

This exercise is, in effect, the same as handling the oars in rowing a boat, the twisting of the wrists corresponding to the action of "feathering the oar", and produces a pretty effect as a class exercise.

To perform this exercise, two apparatuses are necessary; one of the handles of each either passed through rings, as in "The Pulleys," or tied to the back of a chair placed against the one on which the

* For this exercise I am indebted to Mr. F. J. Haggerty, Principal of Grammar School No. 4.

performer is sitting; or they may be held by a second person, as shown in the engraving, either seated on a bench, or upon chairs, with their backs toward each other. The band being parallel with the arms, the lower or longest part of the handles will be turned inward toward each other, while the tops of the handles will be turned outward. The movements are with the arms bent and the hands grasping the handles, as shown in Fig. B. Both arms are extended suddenly, the handles twisted as in "feathering the oar." These movements will be like a person propelling the boat with his face to the bow. By securing two of the handles to any object in front of you, or by two persons seated opposite each other, one person holding a handle firmly on each knee, the ordinary movements of rowing with the back to the bow of the boat can be performed.

FOURTH SERIES.

POSTURES.

These exercises are more especially designed to bring into action the muscles of the trunk and lower extremities, at the same time that they can be used for individual, combined or class exercise.



The Salaam; or Persian Salutation.

SPINE AND ARMS, HEAD AND NECK.

This exercise is generally used at exhibitions at the beginning and ending of the exercises, as a greeting to the audience. The music should be very slow, a "tremolo" being the most appropriate for this figure. The movements are begun by taking position as in Fig. 1 of 1st Series, the body erect, both arms bent, the band across the chest. The 1st movement is: slowly extend *both arms*, bending the body and lowering the head until the arms are extended full length on a level

with the shoulders, and the head is brought to a level with the arms. The 2d movement is, with the eyes looking downward, slowly raise the body, at the same time bending the arms inward; and the 3d movement when the arms are almost bent, as in Fig. 1; bring both hands up to the shoulders, throw the head back, and raise the eyes, all simultaneously, to the position as in Fig. 1.

This exercise can also be performed quickly, and in two movements, the 1st bending downward and extending the arms, the 2d, up and back to position, as in Fig. 1.



The Supplicant.

LEGS, FEET, ARMS, CHEST, HEAD, AND NECK.

The position, as shown, is, left knee bent, the right

leg extended, the arms obliquely down at the sides, the band held behind and horizontal, the head thrown back.

The movements are—1st, raise the left hand, as shown by the *dotted arm*; 2d, down again to position; 3d, moving the right hand to the right; 4th, back to position; 5th, moving the left hand to the left; 6th, back to position; 7th, moving both hands at once, the right to the right, the left hand to the left, as shown by *dotted lines C C*; 8th, bring the body erect by moving the hollow of the right foot against the heel of the left foot; 9th, back to position. Repeat, and reverse, with the right leg bent and the right arm raised.



The Reaper.

TRUNK, WAIST, LEGS, ARMS, HEAD AND NECK.

The position of this exercise is, the body inclining

to the left and bending slightly forward, the feet somewhat apart, the left foot in advance of the right foot, the left arm extended down at the side, the right hand raised nearly up to the left shoulder.

The movements are—1st, inclining the body to the right, as shown by the *dotted figure*; carry the right hand obliquely down, following the *dotted line A*, and raising the left arm, following the *dotted line B* to the left shoulder; 2d, incline the body, lower the left arm and raise the right arm back to position. Repeat.



The Sharpshooter.

TRUNK, LEGS, HEAD, NECK, AND ARMS.

The position is, the left leg bent, the right leg extended backward, the right foot being in a transverse direction from the left foot, with its hollow or instep in a line with the left heel; the body inclined forward, the left arm extended level with the shoulder, the right arm bent, its elbow level with the top of the head.

The movements are: 1st, move the right hand back to the right shoulder; 2d, bend the left arm, bringing the left hand to a level with the forehead; 3d, extend the left arm again, and 4th, move the right hand forward again to position; 5th, in one move throw the body backward, as in the *dotted figure*, having the left leg extended and the right leg bent, the feet and arms remaining as they were; 6th, bring the body, in one move, forward to position; 7th, back to *dotted figure*; 8th, forward to position. Repeat. These movements may also be made with the position of the legs reversed, the right leg bent, the left leg extended, the right arm extended and the left arm bent.



The Marksman.

TRUNK, LEGS, HEAD, AND NECK.

Position—The left leg forward and flexed, the right

leg thrown backward, the left foot parallel with the left arm, the instep of the right foot in line with the heel of the left, the left arm extended, the right arm bent.

MOVEMENTS—1st, bring both feet together, turning the body to the front, dropping the left arm to the side, and carrying the right hand across the chest to the left shoulder, bringing the band at the side, as in *dotted arm and band A and B*, Fig. 6; 2d, back to position; 3d, advance the right about six inches from the left foot, bringing the body erect and flexing the left arm; 4th, incline the body forward, flexing the left knee and straightening the left arm; 5th, straighten the body, flexing the left arm; 6th, back to position. Repeat, and reverse with the right arm extended, &c.



The Archer.

HEAD, NECK, TRUNK, LEGS AND ARMS.

Position—The left leg bent to an angle, the right

leg extended backward, the right foot being in a transverse direction from the left foot, with its hollow or instep in a line with the left heel, the body inclined slightly forward, the left arm extended obliquely upward, the left hand level with the forehead, the right arm bent, the right hand resting against the right hip.

The Movements are—1st, bring the hollow of the right foot close against the heel of the left foot, bringing the body erect; 2d, throw the right foot forward to position. Repeat. The position of the legs and arms may be reversed in this as in the preceding postures.



The Winged Messenger.

HEAD, NECK, LEGS, ARMS AND CHEST.

The Position is—The left leg bent, the right leg extended behind, the left foot pointing forward, the right foot pointing transversely with its instep or hollow, in line with the left heel, the body inclining very slightly forward, the left arm raised obliquely, and the right arm lowered obliquely.

The Movements are—1st, bring the hollow of the right foot close against the heel of the left foot, bringing the body erect; 2d, advance, by throwing the left leg forward, bending it as in position, advancing by repeating these movements. The position of the legs and arms may be reversed, left foot being advanced, and the right arm raised.



The Harlequin.

SPINE, LEGS AND ARMS.

The Position is—The left leg bent, the right leg extended, the left arm extended obliquely down, the left hand level with the knee, the right arm extended obliquely upward.

The Movements are—1st, lower the right hand, following the *dotted circle*, at the same time raising the left hand, thus reversing the position of the arms, the left arm being raised, and the right lowered; 2d, bring both arms again to position; 3d, wheel on the left foot facing to the rear, the right leg being swung around to aid the body in turning; 4th, wheel on the

left foot to front face. These movements may be made with the position of the arms and legs reversed, the left arm being raised, the right lowered; the right leg bent and the left leg extended.



The Gymnast.

HEAD, NECK, TRUNK, LEGS AND ARMS.

This Position is—The left leg bent, the right leg extended, the toes of both feet pointing diagonally in front of the body, the left arm extended downward, the left hand just below the knee, the right arm extended upward, the body inclining to the left.

The Movements are—1st, with the feet immovable incline the body to the right, lowering the right arm

and raising the left, placing the hand as shown by the dotted lines; 2d, incline the body to the right, as in position.

The Dancer.

TRUNK, LEGS AND ARMS.

This Position is the same as in Fig. 4 of the first series, the body erect, the heels close together, the right arm extended obliquely upward, the left arm extended obliquely down.

The Movements are—1st, lower the right arm and raise the left, following the dotted lines from B to A, at the same time drawing the right foot back, so that its instep is brought against the heel of the left foot, turning the body slightly to the right. 2d, lower the left arm and raise the right, moving the left foot backward, bringing its instep against the heel of the right foot, turning the body slightly to the left; the feet should slide along, the body moving by a sort of swinging motion of the arms in raising them up and down. Repeat.

The advance movements are made by bringing the heel of the left foot against the instep of the right foot, and then the heel of the right foot against the instep of the left foot, raising and lowering the arms, and turning the body in the forward movements as in the backward movements.

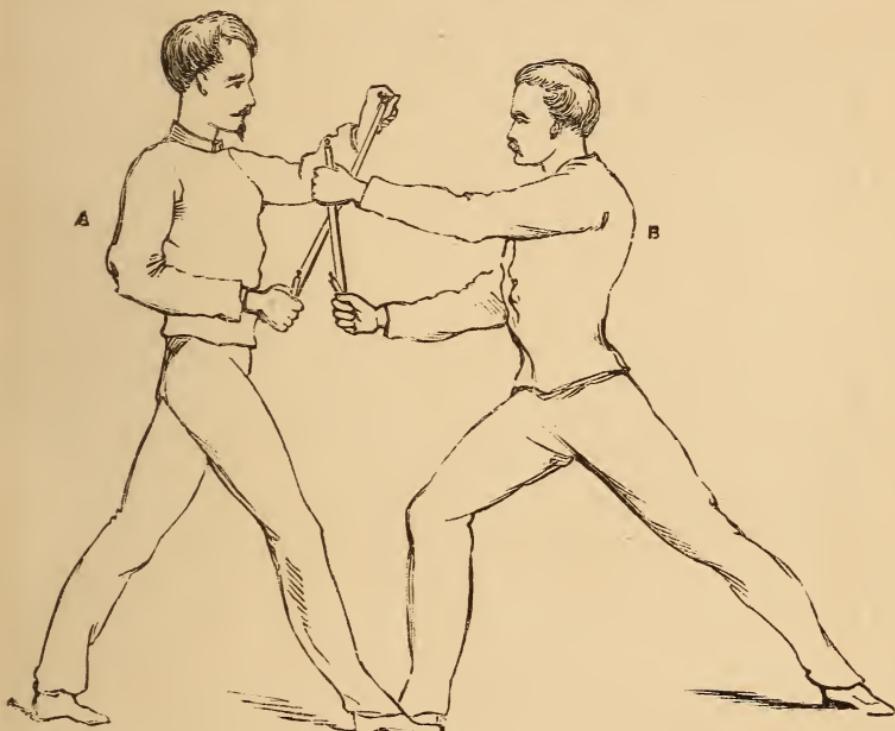
The Dancer--2d Position.

HEAD, NECK, TRUNK, LEGS AND ARMS.

This Position is the same as in the Supplicant.

The Movements are—1st, raise the right hand, carrying it over the centre of the head forward and down in front to a level with the left hand; 2d, raise

the left hand, carrying it over the centre of the head backward and down to position. The movements of the hands should be continuous, the body inclining forward as the right hand is carried forward, and backward as the left hand is carried backward.

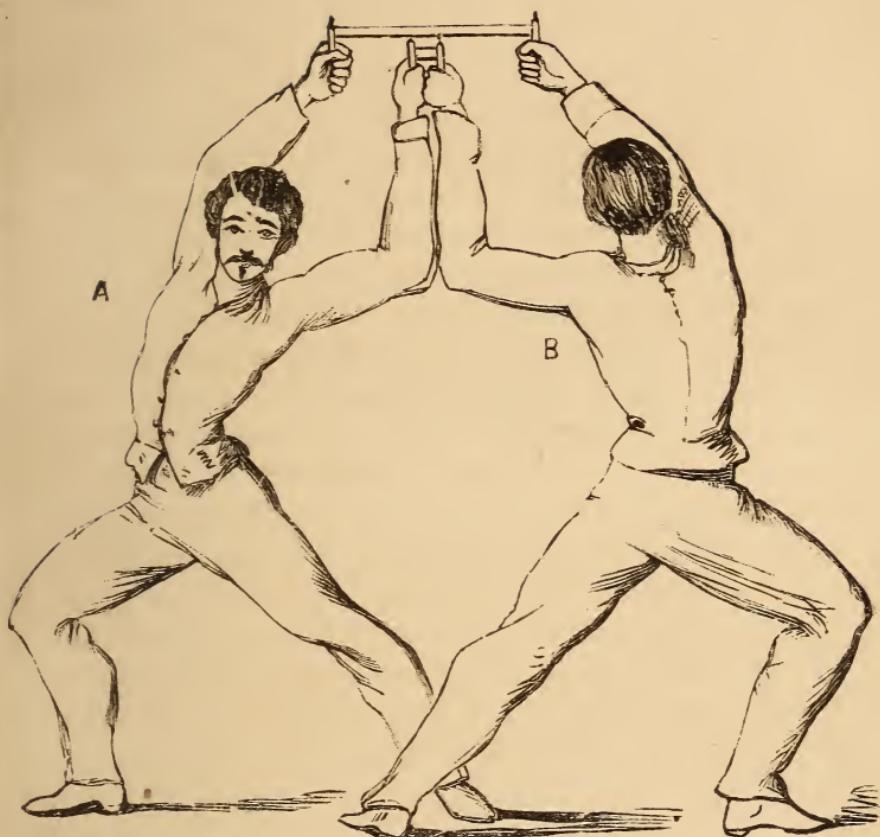
FIFTH SERIES.**COMBINED EXERCISES.****The Fencers.**

TRUNK, LEGS AND ARMS.

The position is, the right feet close together. A stands with the right leg forward, slightly flexed, the left leg thrown backward, the body erect, the right arm bent, the right hand at the waist, the left arm

* For this exercise, I am indebted to Mr. John H. Myers, Vice-Principal of No. 11.

bent, the left hand raised. B stands with the right leg bent, the left leg thrown back, the instep of the left foot in line with the heel of the right foot, the body inclined slightly forward, both arms extended in front, the left arm raised, the left hand level with the lower part of the face, the right arm lowered, the right hand level with the waist; the bands will cross obliquely and just touch. The movements are: 1st, both draw the right feet back to the left, bringing the bodies erect; 2d, reverse the position, A throwing the left leg forward, slightly flexed, and the right leg backward; B throwing the left leg forward and bent, with the right leg extended backward, the left feet being close together; and in the same movement reverse the position of the arms, A raising the right arm and lowering the left, while B lowers the right and raises the left arm, the bands crossing obliquely as before, both stamping the feet in changing position. Repeat, and vary by A extending both arms and bending the leg, while B has both arms bent.



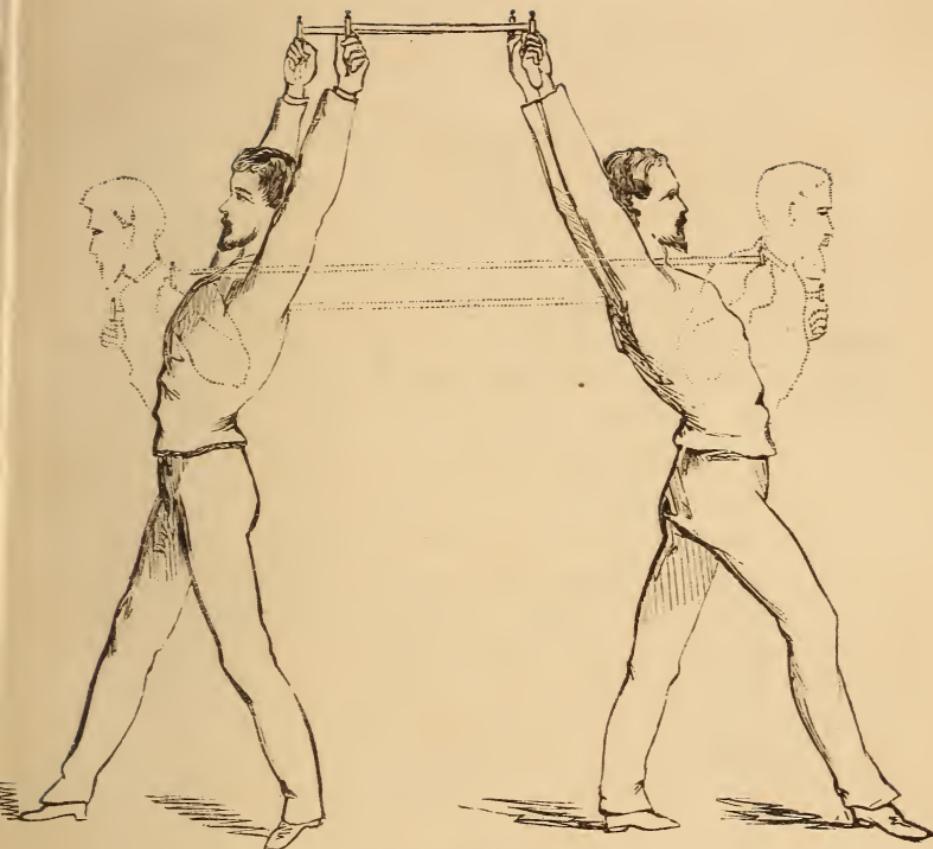
The Wrestlers.

TRUNK, HEAD, NECK, ARMS AND LEGS.

Position—A has the right leg forward and bent, the left leg extended sideways, the right arm extended upward, and the left arm bent. B has the right leg thrown forward and bent, the left leg extended, the right arm extended upward, the left arm bent, body and face to the rear ; the bands will cross, that held by the left hands will pass under the band held by the right hands.

The Movements are—1st, B lowers the left arm, and wheeling to the right turns under the upper band,

with his back to A, bringing both his feet together, while A comes to an erect position and remains immovable, the four arms being extended upward; the bands in this movement will be parallel; 2d, B lowers the left arm, wheeling to the left, turns under the upper band and faces A; 3d, A lowers the left arm, wheeling to the left, under the upper band, and turns with his back to B, bringing his feet together, B remaining immovable, the four arms extended upward; the bands will in this movement be crossed; 4th, A lowers the left arm, wheeling under the upper band, and comes again to position; 5th, A and B wheel simultaneously, A by the left and B by the right, turning back to back; the bands in this movement will be crossed; 6th, both wheel back to position.



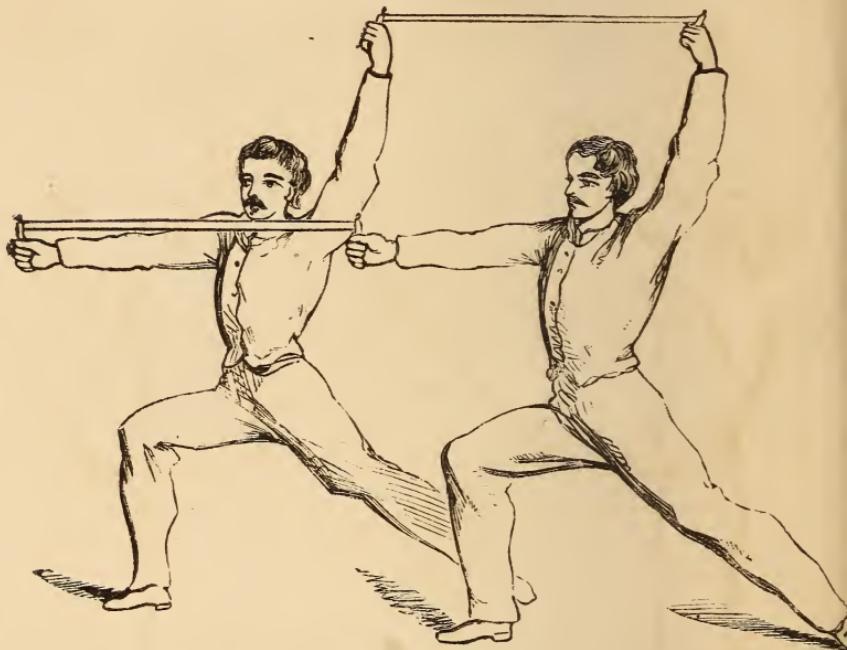
The Athletes.

TRUNK, LEGS AND ARMS.

Position, back to back, both arms extended upward, the right legs thrown forward and flexed, the left legs backward, the bodies inclining backward.

MOVEMENTS.—1st, bring both feet together and bodies erect; 2d, bring the *left* feet close up to each other; 3d, throw the right feet forward; 4th, bend the arms, bringing the hands to the shoulders; 5th, bend the bodies forward as in dotted figures; 6th, the bodies upright again; 7th, extend the arms sideways level with the shoulders; 8th, bring the

arms to the shoulders; 9th, extend the arms upward; 10th, bring the bodies erect; 11th, out to position.



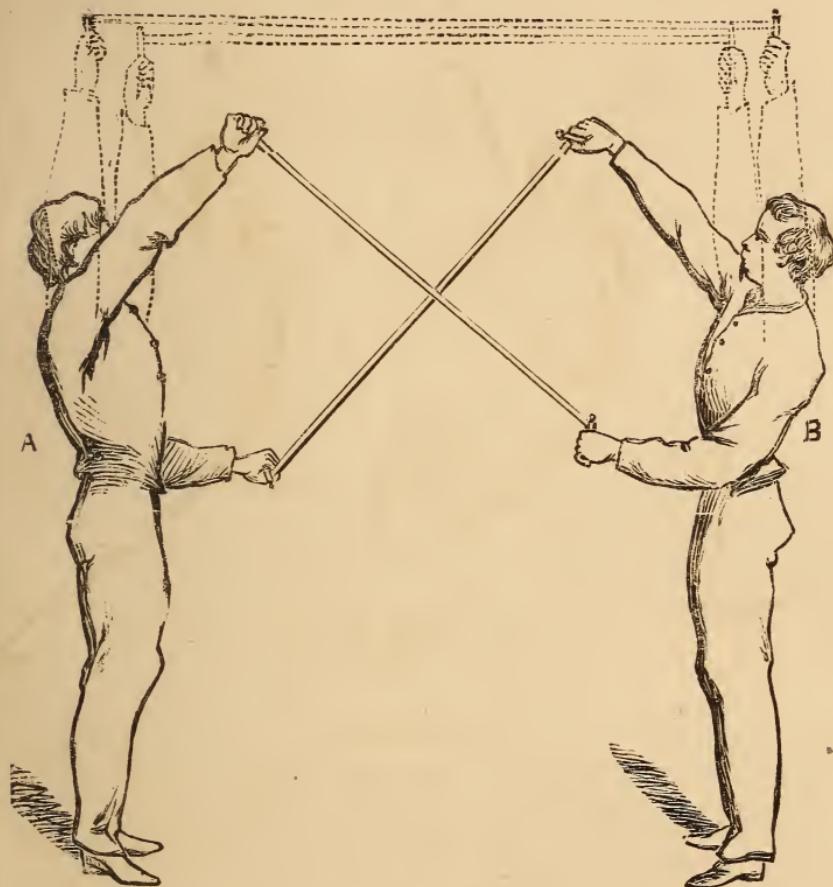
The Racers.

TRUNK, ARMS AND LEGS.

Position.—The right legs forward and bent at an angle, the left legs thrown backward, the right arms extended in front level with the shoulders, the left arms extended upward.

MOVEMENTS.—1st, each one brings the left foot against the right foot, bringing the body erect; 2d, throw the right feet forward, bending the right legs; 3d, each one brings the left foot against the right foot, bodies erect; 4th, out to position. The reverse movements are made by bringing the right feet back to the

left, and throwing the left feet backward, moving backward by these movements.



The Combatants.

*TRUNK, HEAD, NECK, ARMS AND LEGS.

Position—The right arms extended obliquely upward, the left arms bent, the left hands level with the waist.

* For some of the movements in this Exercise I am indebted to Miss Carrie V. Franklin, Principal of Primary Department No. 11.

MOVEMENTS.—1st, drop the right hands and raise the left; 2d, drop the left hands and raise the right; 3d, stamp the right feet, bringing them close together; 4th, raise and lower the right and left hands alternately; 5th, back to position; 6th, extend the arms upward; 7th, raise and lower each hand alternately, bringing the hands to the shoulders and extending the arms upward in the movement; 8th, back to position; 9th, drop on one knee, having the bands crossed; 10th, up to position; 11th, extend the arms upward; 12th, A lowers the left hand and B the right hand, A turns to the right and B to the left; this will bring them back to back; 13th, both stamp with each foot alternately four times; 14th, turn face to face by A lowering the left hand and B lowering the right; A turns to the left and B turns to the right; 15th, arms and hands to position. In these turning movements one band is held aloft, both A and B turning under it.

The Gymnasts.

TRUNK, LEGS AND ARMS.

Position as on Page 88. A inclines to the right, the right leg bent, the left leg extended to the left, the left arm extended downward, the left hand below the knee, the left arm extended upward; B, a little to the rear of A, inclines to the left with the left leg bent, the right leg extended to the right, the right arm extended downward, the left arm extended upward.

MOVEMENTS—1st, A and B reverse positions by A inclining the body to the left and taking B's position, and B to the right, the body of A passing in front of B in the movement, the feet of both remaining immovable; 2d, back to positions.

TO TEACHERS AND OTHERS.

For the sake of uniformity and precision, when used without music, each movement should be numbered by the instructor, counting the first move as the 1st, the second as the 2d, and so on, and between each move count four regular beats, whether the time be fast or slow, making each movement at "one," thus : "one!" (movement!) two, three, four ; "one," (movement!) two, three, four, and so on. This will give a greater accuracy in timing the movements to music. Each separate exercise may be prolonged by repeating it, at the option of the teacher, or for the sake of variety, may be connected with the succeeding ones, following up one after another without repeating each one separately more than once ; but, of course, a class should become familiar with one exercise before being taught others. When used in a crowded class-room, select such exercises as are best adapted, and, if necessary, shorten the band, as explained on page 69. Many schools use them also in the class-room as a relaxation, and in this manner the dragging weariness and monotony of study is broken when at intervals, even for a few seconds, and it will be found that by this method the mind is relieved and becomes more impressionable on resuming study. *Thus time is gained, not lost.*

There are a few teachers who, as they imagine to save time, dispense with exercise in school, and, as a means of expanding the chest, have recourse to a pro-

cess of *pinioning*—that is, causing the child to sit or stand with its arms folded behind. This is an error. What in reality is needed is *exercise*, that the lungs and muscles of the chest may be properly brought into action, and not impaired by rigidity. There are many exercises which can be used by the children without the necessity of rising from their seats, for which see class-room exercises, page 116.

Music.

These exercises can be adapted to almost any music, by counting the strokes between each movement as already explained, and, if so desired, the movements may be indicated by notes a little heavier than the others; but this will not be absolutely necessary, provided the plan of counting between each movement is followed. The change of position from one exercise to another can also be made by counting, or by a note louder than the rest, or one note forming part of the tune itself. For exhibitions, in such exercises in which the movements are performed with the band at the back, the class should "about face," so that the uniform movements of the band may be seen.

Signals.

These are, as before stated, not absolutely necessary, if the system of counting is adopted, but when otherwise, they are indicated by loud notes, where it is desired to pass on from one exercise to another, without stopping. Thus, from the 1st to the 2d exercise, the 1st ending in position, with the band across the chest, three "signals," or loud notes may be used—1st, for the band overhead; 2d, about face; 3d, down to "*position*" in 2d exercise. But in the reverse movements

signals will not be necessary, as, for instance, in the second exercise, or any other having a reverse movement. After exercising with the right arm a certain number of times corresponding to the music selected, the arm is brought back to "*position*" by a loud note or the end of the tune, which, of course, would be commenced again for the movements of the left arm, and continued on to the end ; but it should be so arranged, that whatever music is chosen the number of moves in the exercise be made to correspond, that the movements may end with the end of the tune, or such part of it as has an *apparent* termination, even though a few notes be struck after the last move, or a part of the air played as a prelude before commencing the exercise.

Between the exercises, as a rest, or in marching, the handles may be used as *castenets*, or by striking one against the other, keeping time to the music.

Class Exercise.

ANY EXERCISE IN THE BOOK MAY BE USED AS A
CLASS EXERCISE.

The first requisite, for a number of persons exercising together with a view to uniformity in appearance, is to size the class. This is done by placing those who are to take part in the exercises in a line, standing perfectly erect, so that the exact height of each one can be judged. The shortest are then placed in the front rank, the next taller in the next rank, and so on gradually, the tallest forming the rear rank ; or, if another arrangement is preferred, the tallest may form two rows in the centre, the shorter ones descending in size on each side, *from* the centre rows, toward the right and left.

[*Note.*—Except in “Forming the Hollow Square,” the word “Rank” will indicate the lines extending from *side to side*, and “Column” will designate the lines *from front to rear*.]

In selecting the exercises it is not necessary to follow the order in which they occur. ANY OF THE EXERCISES IN THE BOOK, excepting “The Pulleys,” MAY BE USED FOR CLASS EXERCISE. In some of the postures and combined exercises, effect is given by stamping the feet on changing position, but in such as the “Health Lift” and “Supplicant,” it would not be appropriate. Many of the posture exercises may be increased, by facing to the sides and rear.

The preliminary movement generally used at exhibitions is

Unrolling the Band.

Position—The heels close together, toes turned outward, body erect and chest thrown forward. The apparatus, being *upside down*, is held in the left hand. For these movements five signal notes are used, counting as in the other exercises, four regular strokes between each move, and moving at the “one:” 1st, raise the left hand to the left shoulder; 2d, raise the right arm bent, carrying the right hand obliquely across the chest to the left shoulder, and inserting the two forefingers through the small elastic tie; 3d, bending the fingers, slip the tie off the handles, retaining it on the lower part of the fingers, and keeping the right hand close to the handles; 4th, turning the left hand downward, raising the elbow level with the shoulders, in this manner turning the handles ready for the grasp; 5th, with each hand grasping the lower part of a handle, move the right hand to the right

shoulder and the left hand to the left shoulder, coming to "Position" as in Fig. 1. The first note of a "tremolo," or slow music, is then struck for—

The Salaam.

When the head is brought to a level with the shoulders and the arms fully extended, a second heavy note is given for the 2d movement, and a third heavy note to bring the body and head completely erect and the eyes raised, as in Fig. 1; following which any exercise in the book, excepting the "Pulleys," may be used for class exercise, in addition to the following combinations for tableaux, &c.

Forming the Bower.*

Position—Stand in columns, both arms raised, holding the bands as shown. This figure is performed in columns.

The Movements are—1st, one column lowering the left hands and the other lowering the right hands, turn back to back, as in the 12th movement of "The Combatants," then raise both hands; 2d, with the 14th movement in "The Combatants," again turn face to face; 3d, one column lowering the right and the other the left hands, turn half round, front face, and bring the hands which are lowest in front of the forehead; 4th, back to position; 5th, perform the same movement as the 3d, facing to the rear; 6th, back to position; in turning, those on the right should lower the left hands and those on the left should lower the right hands, turning to the left, and *vice versa*: this will cause all to turn under the upper bands; 7th, lower and raise each band alternately, the hands being brought level

* See first Frontispiece.

with the shoulders, and extended upward, repeating these movements; 8th, perform the 3d movement again, and raise the bands from the foreheads, extending these arms and lowering the others, repeating these movements; 9th, back to position; 10th, of the front couple, the one to the right lowers both hands to the shoulders; this will bring the bands passing obliquely upward towards her partner; of the second couple the one to the left lowers both hands to the shoulders, the one to the right in the third couple lowers both hands to the shoulders, and so on, every other person on each side lowering the hand; the bands will thus form the Cross Bower; all raise and lower the arms alternately. The number of times for repeating each movement by itself is optional.

Forming the Hollow Square.*

Position—*The front rank* kneeling on left knee, left arm extended, the hand level with the forehead, the right arm bent, its hand on the hip, the body inclined forward, the eyes directed to the hand in front. *The second rank*, left leg bent, the right thrown backward, left arm extended slightly below the horizontal, the right arm bent, its hand on the hip, body inclined slightly forward. *The third rank* stands erect, the right foot pointing to the right, its heel drawn up against the instep of the left foot, which is pointed to the front, the left arm extended level with the shoulder, the right arm bent.

MOVEMENTS.—1st, all come to an erect position, bringing the hands to the shoulders and band across the chest, as in Fig. 1, the middle rank drawing the

* See second Frontispiece.

feet together and the front rank springing to the feet, all in one movement; 2d, all back to position, stamping once on going into position and coming erect; repeat; 3d, all come to the erect position again; 4th, wheel to the right; 5th, reverse position, thus, that which was the rear rank becomes the front rank, and the former front rank becomes the rear rank; in this change of position the right arms will be extended and the right knees bent; 6th, all again come to the erect position, as in Fig. 1, repeating the 1st and 2d movements; 7th, erect; 8th, wheel to the left; 9th, all drop the left arm at the side, carrying the right hand across the chest to the left shoulder, as in Fig. 6, *dotted arm B*; 10th, those at front ends of the ranks move slowly round as a pivot, while those at the rear ends will move quickly, bringing the whole section front face to the front; 11th, go into position; repeat 1st and 2d movements; 12th, erect, as in Fig. 1; 13th, the rear rank and right half of the middle rank about face, and the front rank and left half of middle rank face to the left; 14th, the left end of the rear rank swings quickly around, the right end moving as a pivot very slowly; this will bring the rank facing to the left; the right half of the middle rank will conform its movements to the rear rank, so as to bring it also facing to the left. This constitutes the first section. At the same time the front rank and left half of the middle rank, making the second section, forward a few steps to the left; the head of the second section wheels and marches to the rear, the other part of the section follows, describing an angle or elbow in the movement; having arrived opposite the first section, it will halt; the two sections now forming the parallel

sides of a square; 15th, the long lines will now spread apart, each person leaving room for one between himself and his neighbor; the half ranks conforming to this movement, will spread apart so as to come opposite these spaces; 16th, the half ranks step forward and fill in these spaces, making but one entire line on each side; 17th, the right line throw back the left leg, and the left line the right leg, coming into the posture of *The Archer*, page 84, changing position, charging from left to right, and from right to left, repeating, and then from the Archer to *The Sharpshooter*, page 82.

To form the Hollow Square properly, there should be four sections of three ranks each, rear, front and sides, when space and a sufficient number permits; in that case only the 1st and 2d movements can be made; and in breaking up to form the Archers the front and rear sections will advance toward each other, forming with the side sections similar to the letter ||=||; then the front halves of the side sections will forward, to make room for the middle sections, then the front and rear sections together forming the middle section or cross bar of the ||=||, will divide into two halves, the right half will swing to the right, the left half to the left, filling in the space in the side sections, executing the movements from the 7th to the Archers and Sharpshooters with any necessary modification.*

Forming the Arches.

This figure is performed in columns, and then in ranks.

The columns face each other, the position being as in Fig. 1.

* Some of these movements were performed at an exhibition in Mr. Lafayette Olneys' School, under the direction of Mr. Pettigrew.

MOVEMENTS.—1st, bend the body forward and extend the arms obliquely upward, the hands of the opposite columns should meet and just touch; 2d, back to position; 3d, now in ranks the front rank about face, facing the *second* rank, which is behind them, and form the arches; the third rank about face, facing those behind them, and form the arches with the fourth rank, and so on, every other rank turning to the rear and facing the rank behind it; 4th, back to position. Each move may be repeated separately a number of times before turning.

Forming the Groves.

This figure is performed in columns only, every alternate column facing to the rear, the others being front face. Position as in Fig. 4, the right arms raised obliquely, and the left arms lowered obliquely; the hands of one column should almost touch those of the next column.

The movements are, raising and lowering each arm alternately; then remain in position awhile; now reverse positions by those columns which were turned toward the rear facing to the front, and those which were front face turn to the rear; each column now inclines to its right side; the right hands, being raised, will touch; after remaining thus a while, all raise and lower the arms as before, and then back to position; then reverse the position of the arms, raising the left and lowering the right, and perform the same movements as before, except, in inclining, each column should incline to its left side.

The Moving Canopy.

This figure is performed in ranks only, all face to the front. Position as in Fig. 1, *dotted arms*, both

arms raised, the elbows on a line with the shoulders.

MOVEMENTS.—The same as in the 60th Exercise, the front rank moving the band to the right side, while the second rank moves the band to the left side, the third to the right side, the fourth to the left side, each rank moving the band in the opposite direction to those in front of it.

The Fencers.

This figure is performed in ranks and columns.

All front face. Position as in Fig. 1.

The movements are, the first rank about face taking the posture of "The Fencers," page 91, with the second rank, which remains front face; the third rank in like manner turns to fence with the fourth, and so on, every other rank facing to the rear; then all front face, and back to position as in Fig. 1.

Now, in columns wheel, each column turning, to alternately face the columns on its right and left, and crossing bands with them. The hands in the cross band movements should be alternately raised and lowered, reversing the positions of the bands.

The Oarsmen.

Position and movements the same as in "Rowing the Boat," page 77, except for a class exercise, benches may be used instead of chairs, and instead of securing the handles by means of rings two persons should exercise, seated back to back, as shown.



Forming the Canopy.

This figure is formed in sets of four, two persons having hold of one band, with the right arm extended upward, as shown.

The Movements are—slackening the bands, bring the four right hands together, the arms being extended, they remain thus for a while, to form

The Bouquet.

Then move the arms back again to position.

Quadrilles, Waltzes, Schottisches.

A few examples are here given, not classified, to be improved upon, enlarged, or modified, as preferred. *In executing the turning movements with the two bands, and turning entirely around, to avoid twisting the bands, the handles should not be grasped too tightly.*

Quadrilles can be formed as usual, in sets of four or eight, and the movements made as in any ordinary set, slightly modified to adapt them to the movements for using the bands; as also in the Lanciers, the various changes to be made with the bands will readily suggest themselves to any intelligent mind.

Example: Form sides and heads as usual; then at the proper time raise the bands overhead, and commence the figure by partners bowing, first to each other, holding the band aloft, then turning under the band to the side couples, all incline or bow as usual, going through the various figures of an ordinary quadrille or lanciers, passing, at times, under the band of the *vis-a-vis*, and *vice versa*.

Waltzes are performed in the usual waltz step: when by one person waltzing alone, the band is held overhead, as in Fig. 1, *dotted arms*, obliquely at the sides, as in Fig. 5, or obliquely across the back, as in Fig. 4, if desired, changing the position of the band from side to side in the waltzing. When two persons waltz together, the band should be held by both, and turning under the band in the same direction, or in contrary directions; but, when each partner turns in opposite ways, the entire circle described by both, and the latitude of movement, will be much more circumscribed than when both waltz in the same direction.

The Schottisches, Polkas &c., may be executed in

the same manner, with any modifications which may suggest themselves.

QUADRILLE FIGURES.*

1st Figure is performed by sets of four, in the same position as "The Canopy," page 109. The movements are, bringing the hands together, forming the "Bouquet," lowering the arms and inclining to the centre, and making the complete curtsey.

2d Figure, every body erect again, turn back to back, bend the arms, bringing the hands to the shoulders, incline *very slightly* forward, lowering the heads, thus saluting the other sets.

3d Figure, all back again to position ; first, one partner turns completely around under the band, back to position, then the second, third and fourth, then all turn at the same time. In these movements each one remains in place.

4th Figure, in starting from places, move completely around in a circle back to places, all turning to the right ; then reverse, by turning to the left, in these movements going completely around and back to places.

5th Figure, the same movements as the 4th, except that each set moves in a contrary direction to the others—one to the right, the other to the left, and so forth, and then reverse these movements.

If desired, the 3d, 4th, and 5th Figures may be repeated in waltz step.

6th Figure. In this the bands are not crossed, though they are held with the arms extended upward, and both partners stand on the same side, facing their *vis-*

* For some of these Figures I am indebted to Miss M. Louisa Scott, Principal Senior Department Grammar School No. 41, and Miss Kate R. Enis, pianist of the same school.

a-vis. The movements are: one partner waltzes around the other thus: A starts from place, waltzes around B, the band in this movement passing over B's head, while B turns around under the band; also, in waltz movement, forming, as it were, a revolving pivot, while A follows the outer circle of a wheel. Reverse, moving back again to places; then reverse again, each set moving in contrary direction.

7th Figure, the same movements as the 6th, except that each set moves in opposite directions, one moving to the right, the other to the left, and *vice versa*.

8th Figure, all bend the arms, bringing the hands to the shoulders. The band, now held by the right hand of one partner and left hand of another, will pass across the chest of both, bringing them closer, side by side. Now turn and curtsey to each other, and then to their *vis-a-vis*. Now, one side of the set extend the arms upward, the two partners turning face to face; then the *vis-a-vis*, with their hands at the shoulders, pass under the band held aloft by their opposites, and then, passing again between them and under the band, go back again to their places. The first couple will now remain in their places, after having shifted the handles so that they are held by both right hands. The arms being extended upward, this couple will face toward their *vis-a-vis* and remain thus while their *vis-a-vis* executes the same movements as the first couple.

9th Figure, the end sets only. The movements are —The *vis-a-vis* of the end couple now pass under the band held aloft by the end couple, turn and come back. The end couple now lower their band for the other couple to pass their band over the heads of the

end couple, and pass on the outside of the end couple.

10th Figure. The end couples start from their places and pass under the band of their *vis-à-vis*; then raising their band aloft move forward on each side of the first couple in the next set, carrying the band over the heads of this couple and, lowering their hands, pass between the second couple, and under the band of the second couple, raising their own band again to pass over the heads of the third couple, passing outside of them, as before. In this manner passing between each alternate couple, raising and lowering the band alternately, until, meeting with the other end couple, which has performed the same series of movements, these two couples, meeting half way, bow to each other, turn, and in the same series of movements pass back to their places. This figure is ended by all bowing to partners, then to *vis-à-vis*, and lastly, extending the arms upward.

11th Figure. The end couples do not turn; but all the other couples in the sets turn back to back, forming new sets with their neighbors, and, exchanging handles with them, extend the arms upward, forming "The Canopy." This will leave the two end couples without a *vis-à-vis*, and with their faces turned from the sets.

12th Figure. The new sets having formed "The Canopy," the end couples turn, facing the sets, and the couples in the sets turn back to back; at the same time one of the end couple starts from their place with the band across the chest and hands at the shoulders, pass to the front and enter under the canopy, passing out at the other side at the same time that the end couple passes out. Those forming the canopy

turn face to face again, the end couple passes on to the other sets, who perform the same movements as the first set, the end couple pass under the canopies from the front, thus describing a serpentine line in passing in and out. The same couple, after passing through all the sets, return by the same series of movements, back to their places. Now the other end couple start from their place, and execute the same movements, and back to their places.

The Planets.

This figure requires four sets. The end couples remain as they were, as also the two adjoining sets, but the middle set breaks up, separating the bands, and both couples turn back to back, holding their bands aloft. This will make two sets of eight each. The two couples forming the canopy now move in a circle, to the right, while each of the outside couples move around to the left, two outside couples revolve around each canopy, which moves slowly, while the outside couples move quickly. Those forming the canopy move around in a slow waltz step.

Forming the Bower.

The position is as shown in the first frontispiece. If desired, the same series of movements having been performed as described on page 103, the column to the right wheels facing to the right; this will bring the bands crossed; then all, with the schottische step, move sideways to the rear, then forward again to their places, then with the same step, move first to the right, then to the left, then to places. Now the column to the right wheels back again; the first two persons opposite each other, forming the first couple, step forward

a few steps, at the same time the lines lower their hands to the shoulders, and advance toward each other. The first couple now, with the schottische step, pass to the rear, outside of the columns, and carry the bands over the heads of the columns. The first couple having reached the rear end of the column, the other couples follow next in order, and in like manner until the last couple is, by this change of position, brought in front. The columns now separate, forming in open order as at first, and extending the arms upward, form "The Bower." The rear couple now lower their bands, and pass under the bower to the front; the other couples follow next in order, until all have resumed their original places.

Folding the Band.

When the apparatus is no longer required to be used, bring the two handles together. This will make the band double to half its length. In this shape the band is to be wound spirally around the two handles forming the strands; then slip the elastic tie over the end of the band, and in this manner it is secured. The No. 2's, however, require to be folded differently; the handles are not brought together; the band is to be wound around one of the handles only, and without doubling the band.

For class exercise these movements may be employed thus: at the 1st signal bring both handles together, at the 2d wind up the band, at the 3d turn the handles *upside down*, and slip the elastic tie over; 5th, both arms down at the sides.

EXERCISES FOR THE CLASS ROOM.

In school, when it is desired to use them in crowded class rooms without the scholars rising from their seats, as a relaxation and relief for an instant, select any of the following from the 1st and 2d series. In those exercises in which the band is held with arms down at full length, it will be necessary to modify that position, when the scholars are seated, by holding the lower hand level with the waist :

3d, 11th, 14th, 16th, 23d, 26th, 48th, 52d, 54th, 75th, 78th, 85th, 91st, 96th, (3d, 11th, 17th and 24th, are not to be used in 2d series), and combined exercises, as in the following examples: one band to two persons held aloft by the right hand: 1st, moving the arms from the perpendicular to the horizontal in front, and bent with the shoulders: 2d, down, bringing the hands on the knees; 3d, up again to the shoulder; 4th, perpendicular, and also stretching the band by the hands, moving in opposite directions when level with the shoulder. Repeat any of those movements. Another mode of combined exercise, when seated, is with two bands, those on the front seats passing one end of their band to those on the second row of seats, who likewise pass one end of their band to those on the first; the first and second rows having hold of one band by the right hands, and the other by the left hands, the bands will pass over the shoulders of those on the front bench.

MOVEMENTS.—1st, extending the arms upward; 2d, lowering them; 3d, moving both bands forward; 4th, backward; 5th then moving each band alternately forward and backward; 6th, lowering the left arms

and passing the band held by the right hand over the heads to the left shoulders ; in this movement the right hands will be on a line with the left elbows, and the left hands with the right elbows, the forearms being crossed like an X ; 7th, back to the perpendicular, repeating any of these movements. "Rowing the Boat" may also be used for class-room, as follows : the first bench seated as shown in the engraving, but those on the second bench, instead of having their backs turned, will sit as usual, the bands being held one by the right hands and the other by the left hands ; in the movements, when those on the front bench extend the arms, those on the second bench will keep the hands at the shoulders, inclining forward to correspond with the movements of those on the front bench. In these class room exercises those on the other benches will also follow the examples here given ; the combinations can then be changed by those on the second benches exercising with those on the third, those on the third exercising with those on the fourth, and so on. This forms the reverse exercise ; those who were before exercising the arms will in this be exercising the chest, and those who were before exercising the chest, will now be exercising the arms. When the room is not crowded, and the pupils exercise standing, any of the 1st, 2d series, combined or postures may be used. When the class room is crowded, the band may be shortened as described on page 69. So that the arms in their movements may not occupy too much lateral space. As this will only be necessary for a few of these exercises, in which the band is to be very slightly stretched, but little additional weight will be added.

It has been said, "all mankind are invalids," or in other words that "Health in perfection is never seen in such a world as ours." This is true, since *perfect* health is defined as "perfect freedom from pain and uneasiness at all times," but when the functions act with the nearest approach to regularity, we call it health, and those who have it possess a boon which, though invaluable, costs but little to keep, the price being only moderation and prudence. "*An ounce of prevention is better than a pound of cure,*" and with that view are offered a few

HYGIENIC HINTS.

Numerous theories on the subject of eating and drinking have found their advocates, but experience proves that prescribed qualities and quantities are only for the invalid. Each one is, by far, the best judge of that which accords with the peculiarity of his organization. Nature will speak when her laws are about to be trasgressed, and, to avoid the punishment which will surely follow, listen to her "still, small voice." The danger is not so much in the use as in the abuse. The physical gourmand should remember that the stomach requires rest equally with the tired brain or arm, and the mental gourmand should also avoid cramming, be it with literature or business speculation. "There is a time for everything," and due consideration should be given to our dual organization. Early rising is generally beneficial, as much sleep debilitates and also induces plethora. It is for that reason those of sedentary habits should rise early; while others, whose pursuits are of an active character, should sleep later. Much and vigorous *mental*

activity, however, needs more rest than bodily labor. Hard beds are preferable to soft ones; too much covering in cold weather is as objectionable as too little in warm weather.

In sleeping, the head should be slightly raised above the level of the chest. Pure air being always necessary, means of proper ventilation should be had. A cold bath in the morning is almost always beneficial, and will, if persevered in, render the skin less sensitive to atmospheric changes. The full bath, half bath, or sponge bath, may be used; but in bathing the head should not be wet. There is in every one more or less determination of blood to the head. The cold bath draws it from the head. If the ordinary modes of bathing are not convenient, bending over a basin, and pouring cold water over the back, the chest and back of the neck, is highly beneficial, and an almost certain preventive of sore throat. A cold foot bath, at night on retiring, serves to prevent a too great tendency of blood to the brain during sleep. A glass of cold water, drank on going to bed and after the bath in the morning, promotes digestion. After bathing, it is not necessary to dry or dress very quickly; the air is tonic in its action on the skin, and may therefore be allowed to assist in absorbing the moisture and closing the pores; but a current or draught should be avoided. A tepid bath and soap may be used occasionally to cleanse the skin. The evil effects of wet feet may be prevented by using the cold foot bath as soon as possible, and of wet clothing by the cold bath for the body. Very hot food and drinks are injurious; so are very cold ones. Either are likely to inflame the membrane, and extremes are always hurtful. Bolting the

food is a prevalent and an injurious habit. It is not what we eat, but what we digest that nourishes. Too much clothing in Winter and too little in Summer should be guarded against. Woolen under-clothing should, if possible, be always worn. The garments used by day should not be used to sleep in at night. *Regularity of habit, timely exercise for both body and mind,* tend to give happiness, comeliness and strength.

INDEX.

	PAGE.
NECESSITY OF PHYSICAL CULTURE.....	7
INTRODUCTORY.....	11
TESTIMONIALS AND EXTRACTS FROM THE PRESS	14
SIZES.....	25
DIRECTIONS.....	25
 FIRST SERIES.....	 27
<i>Chest, Arm and Shoulder Exercises.</i>	
1st, 25th, 33d, 39th, 59th, 86th, 91st.	
<i>Arm and Chest Exercises.</i>	
2d, 6th, 18th, 42d, 56th, 61st, 63d, 65th.	
<i>Arm and Shoulder Exercises.</i>	
3d, 8th, 10th, 12th, 13th, 14th, 28th, 29th, 32d, 35th, 43d, 46th, 48th, 50th, 51st, 52d, 53d, 54th, 57th, 58th, 64th, 70th, 72d, 79th, 80th, 81st, 90th, 93d.	
<i>Spine; Arm and Chest Exercises.</i>	
4th, 7th, 15th, 44th, 68th, 73d, 82d, 95th.	
<i>Chest, Arm, Shoulder and Elbow Exercises.</i>	
5th, 40th.	
<i>Arm, Wrist and Shoulder Exercises.</i>	
9th, 37th, 38th.	
<i>Arm and Elbow Exercises.</i>	
16th, 19th, 26th, 34th, 45th, 74th, 75th, 87th.	
<i>Wrist and Arm Exercises.</i>	
11th, 17th, 24th, 88th.	
<i>Elbow, Wrist and Arm Exercises.</i>	
20th, 69th.	

FIRST SERIES—Continued.*Chest and Shoulder Exercises.*

21st, 22d, 30th, 36th.

Elbow and Shoulder Exercises.

23d.

Shoulder, Elbow and Arm Exercises.

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Chest, Shoulder and Wrist Exercises.

41st.

Wrist and Shoulder Exercises.

47th.

Spine, Arm and Shoulder Exercises.

60th, 94th.

Arm Exercises.

62d, 71st, 76th, 89th, 96th.

Spine, Arm, Shoulder and Chest Exercises.

67th, 77th, 84th.

Arm, Elbow and Chest Exercises.

67th.

Shoulder Exercises.

78th, 85th.

PAGE.

TO SHORTEN THE BAND.....	69
SECOND SERIES— <i>Slow Exercises</i>	70
Tableaux.....	73
THIRD SERIES.....	74
The Health Lift.....	74
The Pulleys.....	76
Rowing the Boat.....	77
FOURTH SERIES— <i>Postures</i>	79
The Salaam.....	79
The Supplicant.....	80
The Reaper.....	81
The Sharpshooter.....	82
The Marksman.....	83

FOURTH SERIES—*Continued.*

PAGE.

The Archer	84
The Winged Messenger	86
The Harlequin	87
The Gymnast	88
The Dancer	89
" second position	89

FIFTH SERIES—*Combined Exercises.*

The Fencers	91
The Wrestlers	93
The Athletes	95
The Racers	96
The Combatants	97
The Gymnasts	98
TO TEACHERS AND OTHERS	99
MUSIC	100
SIGNALS	100
THE HANDLES USED AS CASTANETS	101
CLASS EXERCISE	101
UNROLLING THE BAND	102
THE SALAAM CLASS	103
FORMING THE BOWER CLASS	103
FORMING THE CROSS-BOWER CLASS	104
FORMING THE HOLLOW SQUARE	104
FORMING THE ARCHES	106
FORMING THE GROVES	107
THE MOVING CANOPY	107
THE FENCER'S CLASS	108
THE OARSMEN'S CLASS	108
FORMING THE CANOPY	109
FORMING THE BOUQUET	109
QUADRILLES, WALTZES, SCHOTTISCHE, &c	110
HOW TO ADAPT THEM	110
QUADRILLE FIGURES	111
THE PLANETS	114
FORMING THE BOWER QUADRILLE	114
FOLDING THE BAND	115
EXERCISES FOR THE CLASS ROOM	116
HYGIENIC HINTS	118

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